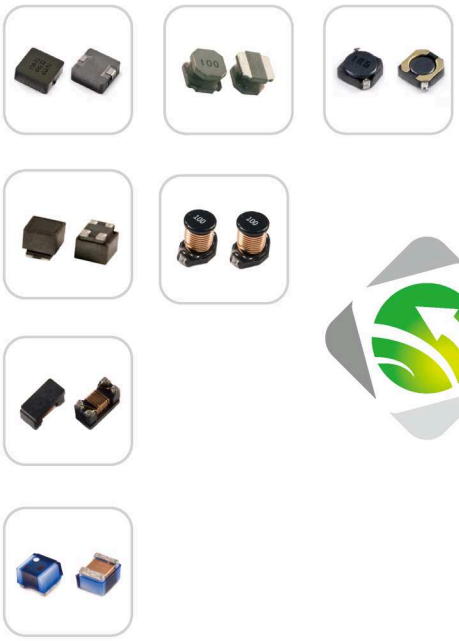


GOTREND

Product Catalogue

- SMD POWER INDUCTOR
- WIRE WOUND CHIP INDUCTOR
- COMMON MODE FILTER
- MULTILAYER CHIP INDUCTOR
- TRANSFORMER
- WIRELESS CHARGING MODULE
- MAGNETIC COMPONENT

REMINDERS

- 本目錄之產品資訊僅供參考，若有變動則不另行通知。選用產品前請與高創科技聯絡以取得最新產品資訊。
- 單品及特殊品項並未列於本目錄，若您有特殊料件需求，或無法於本目錄中取得所需資訊，請聯絡高創科技。
- 若終端應用為軍事、航太，醫療或生命維持等相關儀器，請於正式出貨前依實際打件及操作工作環境進行驗証及測試。
- 本目錄所列之產品指由高創科技及其正式代理商購買之產品。其他第三方販賣之產品與本目錄無關。

- Product information in this catalogue is subject to change without notice, and is for reference only. Therefore, please contact GOTREND Technology to check for the latest information before practical application or usage of the Products.
- Please contact GOTREND Technology for further details of product specifications as the individual specification is available if you can not find special components or information you need in this catalogue.
- If the application is related to Military, Medical, Aerospace, or Life Support Equipment, please conduct your own validation and verification of products in actual condition of mounting and operating environment before commercial shipment.
- This catalogue only applies to products purchased through GOTREND Technology or its official agencies. This catalogue does not apply to products that are purchased through other third parties.

About Us

高創科技專精於電感器及磁性元件的製造與銷售。

自2000年成立以來，一直秉持著創新、效率、卓越、分享為使命，以細心、認真、負責為理念，

提供最佳的 Q.C.D.S 服務，並在各個領域中成長茁壯，如今擁有眾多客戶群，包括眾多國際品牌廠的支持。

高創產品線多樣且完整，包含功率電感、共模濾波器、EMI、抑制磁珠、無線充電磁材等，

可廣泛運用於 DC-DC、工業電腦、網通產品、手持通訊產品、儲存設備、以及消費性產品等。

為了在產品開發上跟隨電子產品應用趨勢的高頻化/無線化/可攜化/輕薄化/節能化的規格挑戰，

於 2010 年成立全球研發中心，提供客戶最新的產品及更多應用選擇；

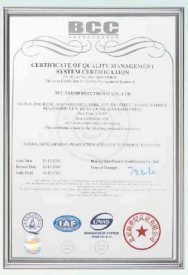
隨著全球環保概念推廣，2006年起全系列產品均符合歐盟 ROHS/ REACH 規範標準，

相信高創科技一定是您最佳的零件夥伴，幫助您事業大展鴻圖！

Robin Tsai

General Manager Robin Tsai

ISO9001認證



ISO14001認證

QC080000認證

Established in 2000, GOTERND Technology is specialized in inductor manufacturing and sales.
Our corporate concepts are Innovation, Efficiency, Excellent and Share, which make GOTREND a top company in electronic components industry.

Also with core competences good price, quality, leadtime, and service, GOTREND has received good reputation from customers all over the world. GOTREND has various product lines and magnetic components including power choke, common mode filter, EMI suppressor, Wireless charging module, and etc. One of our values is to provide one-stop shopping to our customers in different fields so that customers can and rely on us for a total solution.

Knowing that R&D capability is the key factor of success, GOTREND established a global R&D center in Guangzhou, China, in order to keep up with the trend of wireless, portable, energy saving, and slim of eletronic devices.

All GOTREND products are in compliance with EU RoHS/ REACH regulation. And we set up an online harzardous substance management system to provide instant support. Our goal is to build long term relationships with customers and grow together. We expect ourselves to be the best partner of our customers. When you think of inductor, you will think of GOTREND.

Worldwide Locations

HQ
Taipei Headquarter
70
Sales and Customer Support
New Taipei City, Taiwan

GTR
China Factory
800
Manufacturing
Guangzhou, China

GFT
Shenzhen Sales Dept.
15
Sales and Customer Support
Shenzhen, China

GNK
Tainan Sales Dept.
3
Sales and Customer Support
Tainan City, Taiwan

History

2013：擴大營運，大陸華東據點即將成立。

2012：研發及量產WPC無線充電線圈與磁材，GW系列。

2011：陸續研發更多小型化及大電流產品，GNR系列、GSTD系列等。

2010：成為APPLE公司iMac機種，電源模組低雜訊電感器GSDRK系列供應商。

2010：廣州特創廠成立，並成立全球研發中心；台北總公司擴展營運，搬遷至中和遠東世紀廣場。

2009：廣州一廠取得QC080000及OHSAS18001認證。

2008：廣州一廠通過ISO14001認證。

2007：成為Qualcomm / Atheros / Ralink 方案公司策略供應商及設計夥伴。

2007：廣州一廠通過ISO9001認證。

2006：成為MOTOROLA合格供應商，產品應用於 STB/Cable Modem。

2006：領先同業全產品符合歐盟RoHS規範，並取得多家國際IT大廠客戶優先認証。

2005：GTSD系列供應WiFi應用客戶群，月產銷超過10KK。

2005：SMD CHOKE月產量達25KK，月銷售超過20KK。

2004：超薄系列 GSCR/GXRD打入TFT產業，供應 CMO/AUO/Hanspree等大廠。

2004：研發大電流電感GMAT、GMAR系列，廣泛運用於主機板及顯卡。

2003：成為Microsoft XBOX遊戲機零件合格供應商，GDO/GSDR 系列大量交貨。

2003：研發小型化Shielding產品GTSD32系列，廣泛應用於DSC產品, 供應給華晶、普立爾、佳能等相機大廠。

2002：成功研發薄型化產品GSDR31P，高度僅1.0mm，廣泛應用於DSC產品，高達80%市佔及客戶愛用。

2002：成功開發ADSL用EP13 SMD Transformer，替代歐美品牌提供客戶更好Q.C.D.S。

2002：GTLQH系列供應Microsoft ADSL Modem，月產銷10KK/M。

2001：將電鍍技術成功導入SMT CHOKE 量產的領導台商之一。

2000：高創科技成立，總公司設於新北市板橋；專精於電感器及磁性元件的製造與銷售。

2013 : East China branch office will open for expanding operation.

2012 : Developed and mass produced GW-Series, Tx and Rx coil for Wireless charging.

2011 : Developed more low profile and high current products, such as GNR and GSTD series.

2010 : Supplied SMD Inductor GSDRK-Series to Apple iMAC.

2010 : Established TecTrend Technology. Moved to a new HQ in Zhong He Dist., New Taipei City.

2009 : GuangZhou First Factory acquired QC080000 and OHSAS18001 Certificate.

2008 : GuangZhou First Factory acquired ISO14001.

2007 : Co-worked with IC companies like Qualcomm, Atheros, and Ralink for reference designs.

2007 : Established GuangZhou First Factory for worldwide operation and acquired ISO9001.

2006 : Became MOTOROLA's approved vendor and supplied SMD Inductor to STB and Cable Modem.

2006 : All parts are in compliance with RoHS and JPGSSI.

2005 : SMD Inductor GTSD-series dominated Wifi customers, monthly sales was over 10KK.

2005 : Monthly Capacity of SMD Choke was up to 25KK, monthly sales quantity was up to 20KK.

2004 : Low Profile Inductor GSCR and GXRD was adopted by TFT customers like CMO, AUO and Hanspree.

2004 : Developed High Current power inductor GMAT and GAMR series, IDC up to 40Amp.

2003 : Supplied SMD Inductor GDO/GSDR-Series to Microsoft XBOX.

2003 : Developed low profile shielding inductor GTSD32P-series for DSC customers such as Altek, Asia Optical, Premier, and Canon.

2002 : Supplied GTLQH-Series to Microsoft ADSL Modem, monthly sales was over 10KK.

2002 : Developed EP13 SMD Transformer for ADSL and replaced American and Eurpoean suppliers with better Q.C.D.S..

2002 : Developed electroplating Low Profile Inductor GSDR31P-series.

2001 : One of the leading manufacturers introducing galvanic technology into mass production.

2000 : GOTREND was established and specialized in DIP/SMD power inductor.

RoHS (Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment)
於2006年7月1日起生效，限制使用於電機及電子產品中的鉛及其它具危害性的物質。
其目的在於限制電機電子產品中的6種物質，以保護人類及環境的安全及健康。

RoHS主要管制的六大項有害物質為：

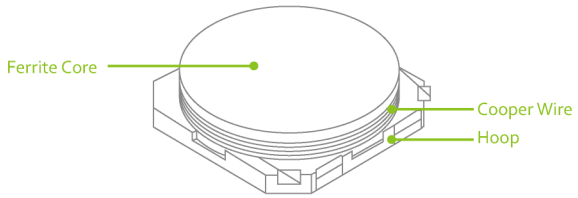
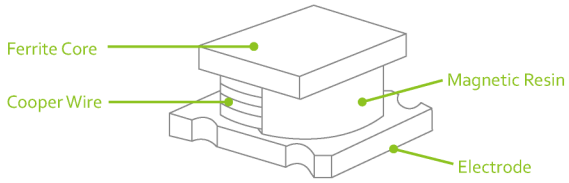
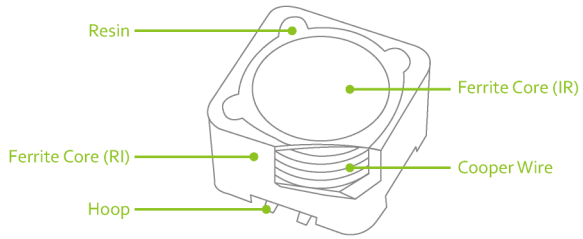
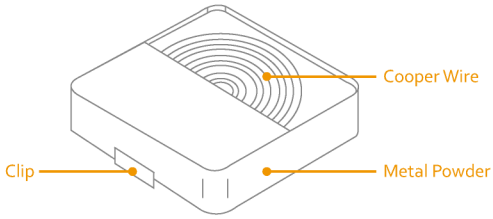
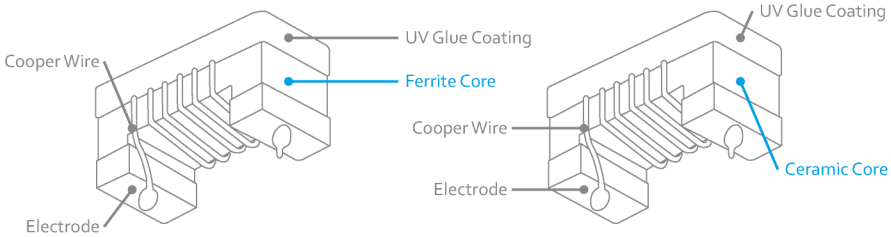
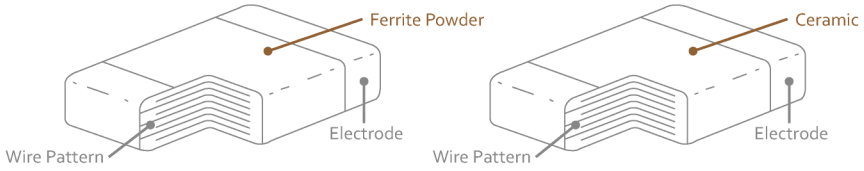
1、鉛(Pb)
2、汞(Hg)
3、鎘(Cd)
4、六價格(Cr6+)
5、多溴聯苯(PBBs)
6、溴聯苯醚(PBDEs)

由於涉及所有電子設備、零配件以及消費性產品，因此製造商及相關供應商皆可能受指令的影響。 這些含少量有害物質的化合物替代品可能涉及產品或製程的重新設計，甚至需要新的生產設備。
無鉛焊劑替代物如銀錫合金等的成本是較高的；無鉛焊劑的熔化溫度比含鉛焊劑又高出許多。在PBB及PBDE的阻燃劑方面，則需另尋其他替代品或更換其他基礎原料。

From July 1, 2006, new electrical and electronic equipment must not contacin lead, mercury, cadmium, hexacalent, chromium, polybrominated biphernyls (PBBs) or polybrominated diphenyl ethers (PBDEs). These must be replaced by other substances. Certain applications are exempt from the regulation of the Directive including mercury in certain types of fluorescent lamps, lead in the glass of cathode ray tubes, electronic components and flouresce tubes, lead in electronic ceramic parts and hexavalent chromium as an anti-corrosion of the carbon stell cooling system in absorption refrigerators. The exemptions will be reviewed every four years. Befoere February 13, 2005, the European Commission wil review the terms of the Directive to take into account any new scientific evidence.

高創科技自 2004年 即開始導入無鉛製程，2006年起產品線全數符合歐盟RoHS，REACH，JGPSSI，以及Sony GP規範。
GOTREND Technology has introduced PB free manufacturing process since 2004. Now all of our products are in compliance with EU RoHS, REACH, JGPSSI and Sony GP.

Construction

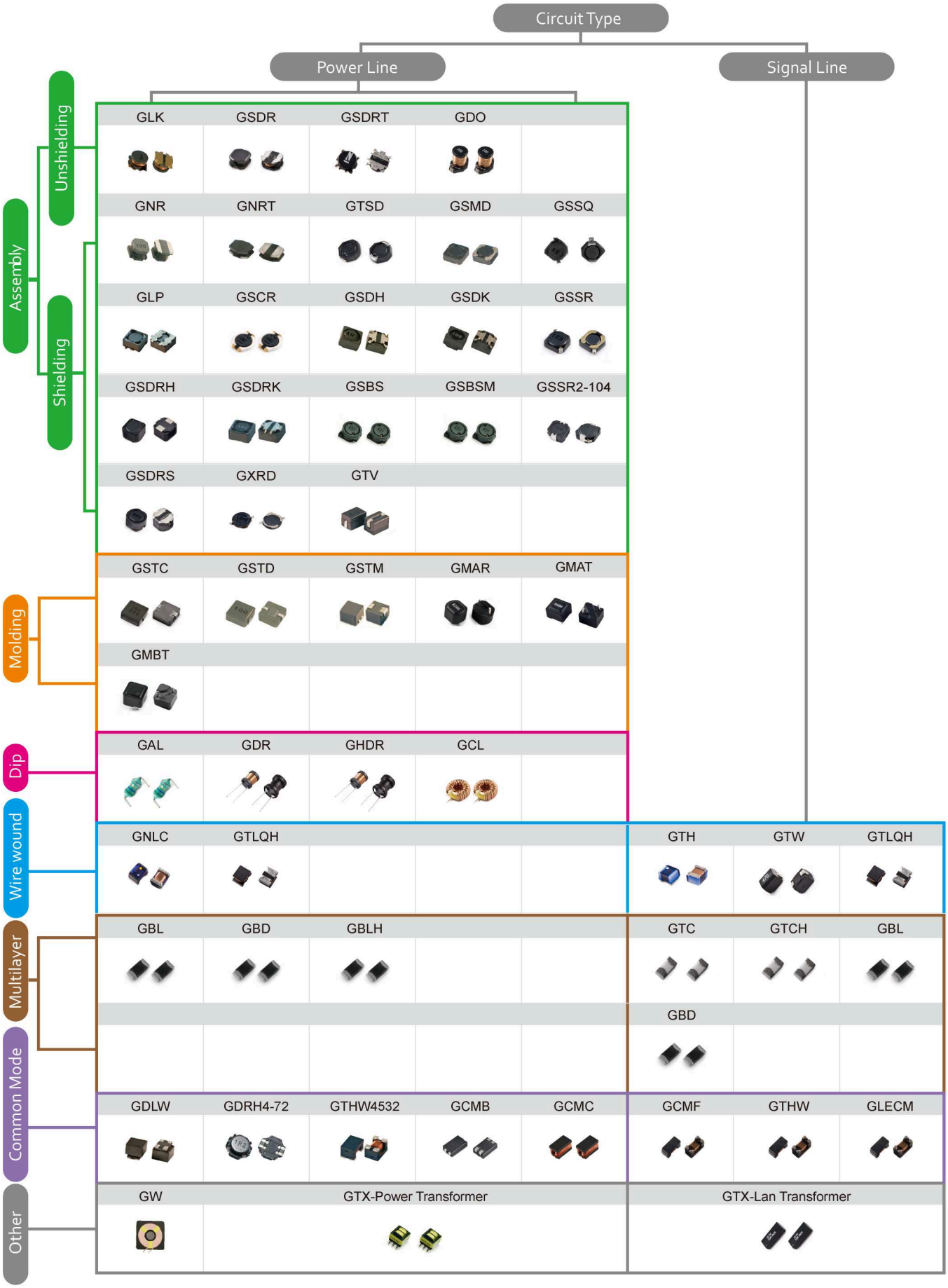
Unshielding	
Shielding	
Shielding	
Molding	
Wire wound	
Multilayer	

Basic Naming Rule

Special Code

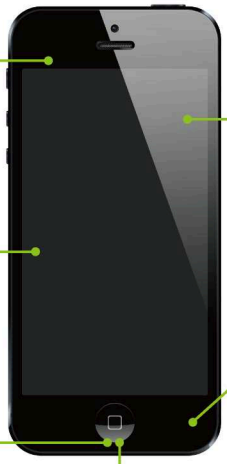
GSDRH 127 P □ - 100 - M

Series Name | Size | PB Free | Indutance | Tolerance


Circuit Type
Power Line
Signal Line
Assembly
Unshielding
Shielding
GLK
GSDR
GSDRT
GDO
GNR
GNRT
GTSD
GSMD
GSSQ
GLP
GSCR
GSDH
GSDK
GSSR
GSDRH
GSDRK
GSBS
GSBSM
GSSR2-104
GSDRS
GXRD
GTV
Molding
GSTC
GSTD
GSTM
GMAR
GMAT
GMBT
Dip
GAL
GDR
GHDR
GCL
Wire wound
GNLC
GTLQH
GTH
GTW
GTLQH
Multilayer
GBL
GBD
GBLH
GTC
GTCH
GBL
GBD
Common Mode
GDLW
GDRH4-72
GTHW4532
GCMB
GCMC
GCMF
GTHW
GLECM
Other
GW
GTX-Power Transformer
GTX-Lan Transformer

Selection Guide By Application

Mobile Phone / PAD



Wifi / Bluetooth Module
- GNR-SERIES
- GNRT-SERIES
- GNLC-SERIES
- GTH-SERIES
- GTC-SERIES
- GTCH-SERIES

DC/DC Converter
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GSTD-SERIES
- GSTM-SERIES
- GBD-SERIES
- GBL-SERIES

EMI Filter for Power In
- GDLW-SERIES

LED Panel Backlight
- GNR-SERIES
- GNRT-SERIES

Switching Charger
- GSMD-SERIES
- GNR-SERIES
- GNRT-SERIES
- GDLW-SERIES

USB2.0/3.0 & HDMI
- GTHW-SERIES
- GCMF-SERIES
- GLECM-SERIES

Automotive Application

Bluetooth Device
- GNR-SERIES
- GNLC-SERIES
- GBLH-SERIES
- GBD-SERIES
- GBL-SERIES

Multimedia
- GNR-SERIES
- GSDRH-SERIES
- GSDRK-SERIES
- GTH-SERIES
- GSDH-SERIES
- GSDK-SERIES
- GSSR2-SERIES
- GTHW-SERIES
- GTHW4532-SERIES

ETC System
- GNLC-SERIES
- GSSR-SERIES
- GNR-SERIES
- GBD-SERIES
- GBL-SERIES

Battery Control Unit
- GSDH-SERIES
- GSDK-SERIES
- GSSR-SERIES
- GSSR-102P-SERIES
- GTHW4532P-SERIES
- GTX-Transformer

Parking Sensor
- GSDR-SERIES
- GNR-SERIES
- GTSD-SERIES
- GLK-SERIES
- GSSQ-SERIES
- GBD-SERIES
- GNLC-SERIES
- GTX-Transformer

Car Lighting
- GSDRH-SERIES
- GSDRK-SERIES
- GDR-SERIES

ABS Control Unit
- GTHW4532P-SERIES
- GBD-SERIES
- GBL-SERIES

Tire Monitoring
- GNLC-SERIES
- GTHW-SERIES
- GBD-SERIES
- GBL-SERIES

Digital Camera / DVR

LCD / LED Panel Backlight
- GNR-SERIES
- GNRT-SERIES

EMI Filter for Power In
- GDLW-SERIES

USB2.0/3.0
- GTHW-SERIES
- GCMF-SERIES
- GLECM-SERIES

Wifi / Bluetooth Module
- GNR-SERIES
- GNRT-SERIES
- GNLC-SERIES
- GTH-SERIES
- GTC-SERIES

DC/DC Converter
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GBD-SERIES
- GBL-SERIES
- GTCH-SERIES

Wireless Router / AP
Modem / 3G USD Drive

EMI Filter for Power In
- GDLW-SERIES

DC/DC Converter
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GSTD-SERIES
- GSTM-SERIES
- GSDRH-SERIES
- GSDRK-SERIES
- GSDH-SERIES
- GSDRK-SERIES
- GBD-SERIES
- GBL-SERIES

USB2.0/3.0
- GTHW-SERIES
- GCMF-SERIES
- GLECM-SERIES

Signal Line Circuit
- GTH-SERIES
- GTC-SERIES
- GTCH-SERIES

Game Console

DVD / HDD / Card Slot
- GNLC-SERIES
- GBD-SERIES
- GBL-SERIES

DC/DC Converter for SSD/HDD
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GLP-SERIES
- GSSQ-SERIES
- GSTD-SERIES

Graphic Processing Unit
- GBD-SERIES
- GBL-SERIES

WLAN / Bluetooth Module
- GNR-SERIES
- GNRT-SERIES
- GNLC-SERIES
- GTH-SERIES
- GTC-SERIES

EMI Filter for Power In
- GDLW-SERIES

DC/DC Converter
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GSTD-SERIES
- GSTM-SERIES
- GSDRH-SERIES
- GSDRK-SERIES
- GSDH-SERIES
- GSDRK-SERIES
- GBD-SERIES
- GBL-SERIES

Security

EMI Filter for Power In
- GDLW-SERIES

WLAN Module
- GNR-SERIES
- GNRT-SERIES
- GNLC-SERIES
- GTH-SERIES
- GTC-SERIES
- GTCH-SERIES

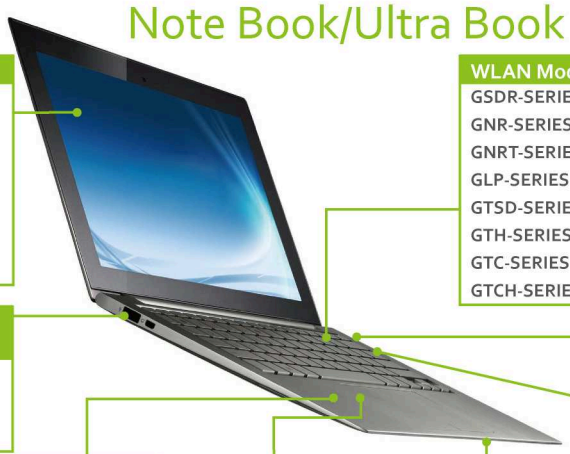
DC/DC Converter
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GSTD-SERIES
- GSTM-SERIES
- GBD-SERIES
- GBL-SERIES

DC/DC Converter for SSD/HDD
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GLP-SERIES
- GSSQ-SERIES
- GSTD-SERIES

USB2.0/3.0 & HDMI
- GTHW-SERIES
- GCMF-SERIES
- GLECM-SERIES

Selection Guide By Application

Note Book/Ultra Book



LED Backlight
- GNR-SERIES
- GNRT-SERIES
- GXRD-SERIES
- GSTD-SERIES
- GSTC-SERIES
- GSTM-SERIES
- GDLW-SERIES

WLAN Module
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GLP-SERIES
- GTSD-SERIES
- GTH-SERIES
- GTC-SERIES
- GTCH-SERIES

USB2.0/3.0 & HDMI & IEEE
- GTHW-SERIES
- GCMF-SERIES
- GLECM-SERIES

Ethernet Port
- Lan-Transformer

EMI Filter for Power line
- GDLW-SERIES

DC/DC Converter for SSD/HDD
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GLP-SERIES
- GSSQ-SERIES
- GSTD-SERIES

Power Supply for CPU
- GSTC-SERIES
- GSTD-SERIES
- GSTM-SERIES

Power Supply for I/O
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GLP-SERIES
- GSDH-SERIES
- GSDK-SERIES
- GBD-SERIES
- GBL-SERIES

LED Lighting

DC/DC Converter
- GSDR-SERIES
- GDR-SERIES
- GHDR-SERIES
- GTX-Transformer

Panel / TV / Monitor

WLAN Module
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GLP-SERIES
- GTSD-SERIES
- GTH-SERIES
- GTC-SERIES
- GTCH-SERIES

RF Module
- GTH-SERIES
- GTC-SERIES

LED Backlight
- GNR-SERIES
- GNRT-SERIES
- GXRD-SERIES
- GSTD-SERIES
- GSTC-SERIES
- GSTM-SERIES
- GDLW-SERIES

Camera Module
- GNR-SERIES
- GNRT-SERIES
- GNLC-SERIES
- GBD-SERIES
- GBL-SERIES

Audio Circuit
- GNR-SERIES
- GNLC-SERIES
- GBD-SERIES

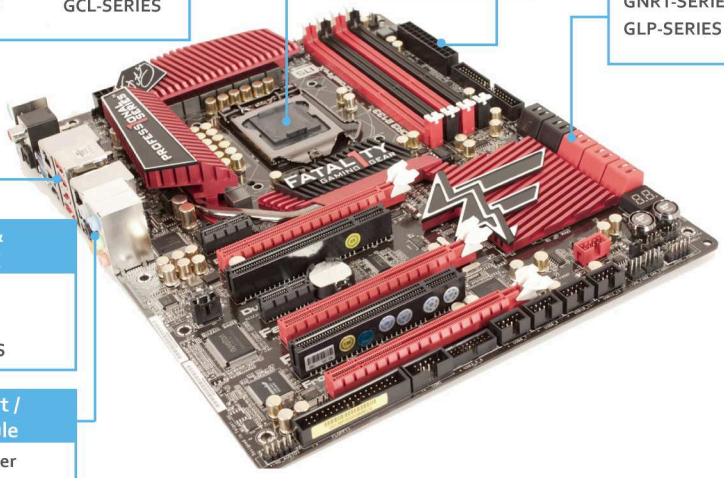
EMI Filter for Power In
- GDLW-SERIES

Mother Board / IPC Graphic Card

Power Supply for CPU
- GSTC-SERIES
- GSTD-SERIES
- GSTM-SERIES
- GMAR-SERIES
- GMBT-SERIES
- GCL-SERIES

EMI Filter for Power In
- GDLW-SERIES

Power Supply for I/O
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GLP-SERIES
- GSDH-SERIES
- GSDK-SERIES
- GBD-SERIES
- GBL-SERIES



USB2.0/3.0 & HDMI & IEEE
- GTHW-SERIES
- GCMF-SERIES
- GLECM-SERIES

Ethernet Port / WLAN Module
- Lan-Transformer
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GLP-SERIES
- GTSD-SERIES
- GTH-SERIES
- GTC-SERIES

SSD / HDD / NAS

USB2.0/3.0
- GTHW-SERIES
- GCMF-SERIES
- GLECM-SERIES

DC/DC Converter
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GLP-SERIES
- GSSQ-SERIES
- GSTD-SERIES

DC/DC Converter
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GSTD-SERIES
- GSTM-SERIES
- GSDRH-SERIES
- GSDH-SERIES
- GSSR2-104P-SERIES
- GBD-SERIES
- GBL-SERIES

Wifi Module
- GNR-SERIES
- GNRT-SERIES
- GNLC-SERIES
- GTH-SERIES
- GTC-SERIES
- GTCH-SERIES

Global Poistion System (GPS)

DC/DC Converter
- GSDR-SERIES
- GNR-SERIES
- GNRT-SERIES
- GSMD-SERIES
- GSDH-SERIES
- GSDK-SERIES
- GBD-SERIES
- GBL-SERIES

Audio/Video Circuit
- GNR-SERIES
- GNLC-SERIES
- GBD-SERIES

ETC System
- GTHW-SERIES
- GCMF-SERIES
- GLECM-SERIES

EMI Filter for Power In
- GDLW-SERIES

LCD / LED Panel Backlight
- GNR-SERIES
- GNRT-SERIES
- GSMD-SERIES

Selection Guide by Height

	Assembly	Molding
1.0 mm	GLK2510 / GLP3210 / GSSQ310 / GNRT2410 / GNRT252010 / GNR2510 GNR310 / GNRT3010 / GNR4010 / GNRT4010 / GNRT5010 / GNRT6010 GSCR1604 / GSCR1704	
1.2 mm	GLK2512 / GLP4212 / GNR2512 / GNRT2012 / GNRT2412 / GNRT252012 GNRT3012 / GNRT4012 / GNRT5012 / GNR6012 / GNRT6012	GSTM3012 / GSTM4012 / GSTD4012 GSTM5012 / GSTD6012 / GSTM6012
1.3 mm	GSDR31L / GSSQ312 / GTSD31	
1.4 mm	GNR5014 / GNRT5014 / GNRT6014	
1.5 mm	GSSQ315 / GNR3015 / GNRT3015 / GSMD415 / GNR4015 / GXRD0715 GXRD1015	GSTD4015 / GSTM5015 / GSTM6015
1.6 mm	GLP3216 / GLP4216 / GSDR31	
1.65 mm	GSCR2506	
1.8 mm	GLP3218 / GLP4218 / GSSQ418 / GTSD32 / GSMD418 / GNR4018 GNRT4018 / GSSR32 / GSCR1606	GSTM5018 / GSTC061 / GSTD6018
2.0 mm	GSDR32 / GSSQ320/ GNR4020 / GSSR42 / GTSD52 / GNR5020 GNRT5020 / GSSR52 / GSDH52 / GSDK52 / GNR6020 / GNRT6020 GSSR62	GSTM3020 / GSTC042 / GSTD4020 / GSTM4020 GSTM5020 / GSTM6020
2.4 mm	GXRD1024	
2.5 mm	GSSR425	
2.8 mm	GNR6028 / GNRT6028	
2.9 mm	GDO0402	
3.0 mm	GTSD33 / GSSR43 / GTSD53 / GSSR53 / GSDH53 / GSDK53 / GSDRH62 GSSR63 / GSBS63 / GNRT8030 / GDO0802	GSTC053 / GSTM5030 / GSTC063 / GSTD6030 GSTM6030 / GSTM1030
3.2mm	GSDR43	GSTM6024
3.5 mm	GSDR53 / GSDRS63 / GSDR73 / GSDRH73 / GSBS73	GSTC133
3.8 mm		GSTM1238
4.0 mm	GNRT5040 / GNRT8040	GSTC104 / GSTD6040 / GSTD1040 / GSTM1040
4.1 mm	GSSR64	
4.2 mm	GSDR104P / GNR8040	
4.5 mm	GSDR54 / GNR6045 / GNRT6045 / GSDH74 / GSDRH74 / GSDRK74 GSBS74 / GSSR2-104 / GSDRH124	
4.8 mm	GSBS104	
4.9 mm	GSDRS74	
5.0 mm	GSDRH64 / GSDR75	GSTM6050 / GSTD1050 / GSTM1050
5.2 mm	GDO0802	GSTC135
5.5 mm	GSDR105 / GSDRS105	
5.8 mm	GSBS126 / GSBSM126	
6.0 mm	GSDRH125 / GSDRK125	GSTM1260
6.5 mm		GSTM1265
6.8 mm	GSBS127	
7.1mm	GDO1306	
7.2 mm	GTV1008	
7.5 mm	GSDR107	GMAR121007
7.8 mm	GSBS128	
8.0 mm	GSDRH127 / GSDRK127	GMBT080808 / GMBT121208
8.6 mm		GMAR121008
9.0 mm	GSDRH129	GMBT121209
9.5 mm		GMAR151309
10.0 mm		GMBT101010 / GMAT121210 / GMBT121210 GMAR121010 / GMAT131210
10.5 mm		GMAT121211
11.0 mm		GMAR121011 / GMBT131211
11.4 mm	GDO0810	
11.5 mm		GMAR151311
12.0 mm		GMBT121212

Selection Guide by Height

	Dip	Common Mode	Wire wound	Multilayer
Under 1.0mm		GCMF1210	GTH1005	GBD060303 / GBD100505 / GBD160808 / GBD201209 GBL100505 / GBL160808 / GBL201209 GTC1005 / GTC1608 / GTC2012 GTCH0603 / GTCH1005 / GTCH1608 GBLH160808 / GBLH201209 / GBLH201609
1.0 mm		GLECM1210	GNLC1610	GBLH252010
1.02 mm			GTH1608	
1.05 mm			GTLQH20L GTLQH25L	
1.2 mm		GCMF2012 GLECM2012 GTHW2012		
1.25 mm			GNLC2012	GBD201212 / GBL201212
1.4 mm			GTLQH20	
1.52 mm			GTH2012	
1.55 mm			GTLQH32L	
1.65 mm			GTW2012	
1.8 mm			GTW2520F GTLQH25 GTLQH31	
2.0 mm		GTHW3216	GNLC2520 GTLQH32	
2.2 mm			GTH2520 GTW3225	
2.3 mm			GTW2520	
2.5 mm		GDLW0502	GNLC3225	
2.6 mm		GSDRH4-72P	GTLQH43	
2.8 mm	GAL0204	GTHW4532		
3.0 mm	GAL0307			
3.2 mm			GTW4532	
3.5 mm		GSMD4-635		
4.0 mm	GAL0410		GTW5650	
4.7 mm			GTLQH56	
4.8 mm		GDLW0504		
5.0 mm	GAL0512			
7.5 mm	GDR0406			
10.0 mm	GDR0608			
11.5 mm	GDR0810			
13.5 mm	GDR0912 GDR1210			
18.0 mm	GDR1016			

Contents

SMD Power Inductor - Unshielding Type

Series Name		Part Name	Dimension (mm)	Inductance Range (uH) 0.1 1 100 1000 10000 20000	Rated Current (Amp)	Page
GLK		GLK2510	2.5 x 2.4 x 1.0	1.0 – 47	0.31~1.8	1
		GLK2512	2.5 x 2.4 x 1.2		0.61~2.75	
GSDR		GSDR31L	3.5 x 3.0 x 1.4	0.2 – 15000	0.12~1.4	3
		GSDR31	3.5 x 3.0 x 1.6		0.057~1.6	
		GSDR32	3.5 x 3.0 x 2.0		0.1~4.5	
		GSDR43	4.5 x 4.0 x 3.2		0.08~5.5	
		GSDR52	5.8 x 5.2 x 2.5		0.2~5.0	
		GSDR53	5.8 x 5.2 x 3.5		0.22~4.5	
		GSDR54	5.8 x 5.2 x 4.5		0.15~5.0	
		GSDR73	7.8 x 7.0 x 3.5		0.28~7.0	
		GSDR75	7.8 x 7.0 x 5.0		0.08~7.5	
		GSDR104	10.0 x 9.0 x 4.2		0.32~8.7	
		GSDR105	10.0 x 9.0 x 5.5		0.15~8.63	
		GSDR107	10.0 x 9.0 x 7.5		0.12~9.5	
GSDRT		GSDRT2610	2.6 x 2.8 x 1.0	0.68 – 220	0.23~1.4	6
		GSDRT2810	3.0 x 3.0 x 1.0		0.2~1.7	
		GSDRT3014	3.2 x 3.2 x 1.4		0.28~2.1	
		GSDRT3512	3.7 x 3.7 x 1.2		0.13~1	
		GSDRT3515	3.7 x 3.7 x 1.5		0.21~1.9	
		GSDRT3518	3.7 x 3.7 x 1.8		0.16~2.8	
		GSDRT5410	5.6 x 5.6 x 1.05		0.36~1.3	
		GSDRT5412	5.6 x 5.6 x 1.2		0.32~1.4	
		GSDRT5419	5.6 x 5.6 x 1.9		0.81~4.5	
		GSDRT7012	7.2 x 7.2 x 1.25		0.45~1.42	
		GSDRT7015	7.2 x 7.2 x 1.5		0.5~2.5	
		GSDRT7018	7.2 x 7.2 x 1.8		0.87~2.5	
		GSDRT7020	7.2 x 7.2 x 2.0		1.0~4.6	
GDO		GDO0402	6.6 x 4.45 x 2.92	1.0 – 7200	0.1~2.9	13
		GDO0802	12.33 x 9.3 x 3.0		0.1~2.4	
		GDO0804	12.95 x 9.4 x 5.21		0.3~9.0	
		GDO0810	12.95 x 9.4 x 11.43		0.8~16	
		GDO1306	18.54 x 15.24 x 7.11		0.06~20	

SMD Power Inductor - Shielding Type

Series Name		Part Name	Dimension (mm)	Inductance Range (uH) 0.1 1 100 1000 10000 20000	Rated Current (Amp)	Page
GNR		GNR2510	2.1 x 2.6 x 1.0	0.47 – 220	0.59~2.5	16
		GNR2512	2.1 x 2.6 x 1.2		0.9~3.7	
		GNR3010	3.1 x 3.1 x 1.0		0.27~1.95	
		GNR3015	3.1 x 3.1 x 1.5		0.27~2.35	
		GNR4010	4.2 x 4.2 x 1.0		0.24~1.8	
		GNR4018	4.2 x 4.2 x 1.8		0.27~4.5	
		GNR4020	4.2 x 4.2 x 2.0		0.28~4.1	
		GNR5014	5.1 x 5.1 x 1.4		1.4~3.8	
		GNR5030	5.1 x 5.1 x 2.0		0.6~4.4	
		GNR6012	6.2 x 6.2 x 1.2		0.35~2.8	
		GNR6020	6.2 x 6.2 x 2.0		0.85~4.5	
		GNR6028	6.2 x 6.2 x 2.8		0.62~6.6	
		GNR6045	6.2 x 6.2 x 4.5		0.8~8.5	
		GNR8040	8.2 x 8.2 x 4.2		0.8~11	

SMD Power Inductor - Shielding Type

Series Name		Part Name	Dimension (mm)	Inductance Range (uH) 0.1 1 100 1000 10000 20000	Rated Current (Amp)	Page
GNRT		GNRT2012PB	2.0 x 2.0 x 1.2	0.47 220	0.9~1.9	25
		GNRT2410PA	2.4 x 2.4 x 1.0		0.39~2.2	
		GNRT2412PA	2.4 x 2.4 x 1.2		0.81~2.35	
		GNRT252010P	2.5 x 2.0 x 1.0		0.56~2.5	
		GNRT252012P	2.5 x 2.0 x 1.2		0.73~2.75	
		GNRT3010PA	3.0 x 3.0 x 1.0		0.38~1.7	
		GNRT3012PA	3.0 x 3.0 x 1.2		0.5~2.2	
		GNRT3015P	3.0 x 3.0 x 1.5		0.32~2.1	
		GNRT4010PB	4.0 x 4.0 x 1.0		0.45~2.0	
		GNRT4012PB	4.0 x 4.0 x 1.2		0.5~2.8	
		GNRT4018PB	4.0 x 4.0 x 1.8		0.7~4.0	
		GNRT5010PB	4.9 x 4.9 x 1.0		0.55~2.35	
		GNRT5012PB	4.9 x 4.9 x 1.2		1.2~4.5	
		GNRT5020PB	4.9 x 4.9 x 2.0		0.9~4.0	
		GNRT5040PB	4.9 x 4.9 x 4.0		1.1~6.4	
		GNRT6010PB	6.0 x 6.0 x 1.0		0.65~2.4	
		GNRT6012PB	6.0 x 6.0 x 1.2		0.35~2.1	
		GNRT6020PB	6.0 x 6.0 x 2.0		1.05~6.4	
		GNRT6028PB	6.0 x 6.0 x 2.8		0.62~6.7	
		GNRT6045PB	6.0 x 6.0 x 4.0		0.8~9.8	
		GNRT8030PB	8.0 x 8.0 x 3.0		1.1~7.8	
		GNRT8040PB	8.0 x 8.0 x 4.0		2.4~13	
GTSD		GTSD31	3.85 x 3.85 x 1.25	0.47 2200	0.11~1.6	38
		GTSD32	3.85 x 3.85 x 1.8		0.035~1.84	
		GTSD33	3.85 x 3.85 x 3.0		0.07~1.9	
		GTSD52	5.0 x 5.0 x 2.0		0.18~2.33	
		GTSD53	5.0 x 5.0 x 3.0		0.05~4.0	
GSMD		GSMD415	4.0 x 4.0 x 1.5	0.56 150	0.85~2.5	40
		GSMD418	4.0 x 4.0 x 1.8		0.18~3.5	
GSSQ		GSSQ310	3.3 x 3.3 x 1.1	0.47 100	0.21~0.37	42
		GSSQ315	3.3 x 3.3 x 1.3		0.22~0.9	
		GSSQ315	3.3 x 3.3 x 1.55		0.15~2.1	
		GSSQ3120	3.2 x 3.2 x 2.0		0.162~5.35	
		GSSQ418	4.2 x 4.2 x 1.80		0.26~1.68	
GLP		GLP3210	3.2 x 3.2 x1.05	0.4 2200	0.28~1.4	44
		GLP3216	3.2 x 3.2 x 1.6		0.34~1.4	
		GLP3218	3.2 x 3.2 x 1.8		0.74~3.4	
		GLP3810	3.8 x 3.8 x 1.05		0.46~2.4	
		GLP3818	3.8 x 3.8 x 1.85		0.56~39	
		GLP4212	4.2 x 4.2 x 1.15		0.5~3.0	
		GLP4216	4.2 x 4.2 x 1.6		0.52~3.0	
		GLP4218	4.2 x 4.2 x 1.8		0.07~3.2	
GSCR		GSCR1604F	6.6 x 5.5 x 1.0	1.0 1000	0.13~2.1	52
		GSCR1704F	6.6 x 5.5 x 1.0		0.13~2.1	
		GSCR1606F	6.45 x 5.6 x 1.8		0.08~2.3	
		GSCR2506F	9.14 x 7.87 x 1.65		0.16~1.9	

Contents

SMD Power Inductor - Shielding Type

Series Name		Part Name	Dimension (mm)	Inductance Range (uH) 0.1 1 100 1000 10000 20000	Rated Current (Amp)	Page
GSDH		GSDH52	5.2 x 5.2 x 2.0	1.2 — 1000	0.43~4.2	55
		GSDH53	5.2 x 5.2 x 3.0		0.5~4.75	
		GSDH74	7.3 x 7.3 x 4.5		0.25~5.0	
GSDK		GSDK52	5.2 x 5.2 x 2.0	1.2 — 100	0.7~6.0	58
		GSDK53	5.2 x 5.2 x 3.0		0.9~8.7	
GSSR		GSSR32	3.7 x 3.7 x 1.8	1.0 — 1000	0.15~1.6	60
		GSSR42	4.7 x 4.7 x2.0		0.14~1.72	
		GSSR425	4.7 x 4.7 x 2.5		0.15~3.2	
		GSSR43	4.7 x 4.7 x 3.0		0.13~2.56	
		GSSR52	5.7 x 5.7 x 2.0		0.18~2.6	
		GSSR53	5.7 x 5.7 x 3.0		0.16~2.6	
		GSSR62	6.7 x 6.7 x 2.0		0.65~2.6	
		GSSR63	6.7 x 6.7 x 3.0		0.14~4.1	
		GSSR64	6.7 x 6.7 x 4.0		0.2~3.2	
GSDRH		GSDRH62	6.3 x 6.3 x 3.0	1.0 — 5500	0.19~1.94	62
		GSDRH64	6.3 x 6.3 x 5.0		0.14~2.2	
		GSDRH73	7.3 x 7.3 x 3.5		0.16~3.4	
		GSDRH74	7.3 x 7.3 x 4.5		0.18~5.5	
		GSDRH124	12.0 x 12.0 x 4.5		0.5~4.9	
		GSDRH125	12.0 x 12.0 x 6.0		0.4~9.0	
		GSDRH127	12.0 x 12.0 x 8.0		0.55~9.8	
		GSDRH129	12.0 x 12.0 x 9.0		0.45~16	
GSDRK		GSDRK74	7.8 x 7.8 x 4.5	1.0 — 6800	0.35~10.5	65
		GSDRK125	12.5 x 12.5 x 6.0		0.78~14	
		GSDRK27	12.5 x 12.5 x 8.0		0.24~11	
		GSDRS63	6.5 x 5.9 x 3.5		0.42~1.0	
GSDRS		GSDRS74	8.1 x 7.4 x 4.9	4.7 — 470	0.33~2.8	69
		GSDRS105	10.4 x 9.4 x 5.5		0.33~2.06	
GSSR2		GSSR2-104	10.0 x10.0 x 4.0	0.33 — 820	0.3~8.5	71
GSBS		GSBS63	6.2 x 6.2 x 3.0	1.0 — 1500	0.19~2.5	73
		GSBS73	7.4 x 7.4 x 3.5		0.41~3.12	
		GSBS74	7.4 x 7.4 x 4.5		0.27~2.88	
		GSBS104	10.4 x 10.4 x 4.8		0.22~3.6	
		GSBS126	12.8 x 12.8 x 5.8		0.29~3.6	
		GSBS127	12.8 x 12.8 x 6.8		1.0~10	
		GSBS128	12.8 x 12.8 x 7.8		1.3~13	
GSBSM		GSBSM126	12.8 x 12.8 x 5.8	1.5 — 1500	0.35~11	77
		GSBSM128	12.8 x 12.8 x 7.8		2.5~10	
GXRD		GXRD0715	7.3 x 7.3 x 1.5	2.7 — 68	0.5~2.4	80
		GXRD1015	10.3 x 10.3 x 1.5		0.9~3.6	
		GXRD124	10.3 x 10.3 x 2.4		1.27~5.0	
GTV		GTV1008	10.8 x 8.0 x 7.2	0.12 — 0.47	20~50	82

High Current Molding Inductor

Series Name		Part Name	Dimension (mm)	Inductance Range (uH) 0.1 1 100 1000 10000 20000	Rated Current (Amp)	Page
GSTC		GSTC042	4.5 x 4.3 x 2.0		4.0~30	84
		GSTC053	5.2 x 4.9 x 3.0		5.0~14	
		GSTC061	7.4 x 6.8 x 1.8		5.0~45	
		GSTC063	7.3 x 6.8 x 3.0	0.1 — 10	5.5~60	
		GSTC104	11.5 x 10.3 x 4.0		17~75	
		GSTC133	13.8 x 12.8 x 3.5		27~65	
		GSTC135	14.0 x 12.8 x 5.2		21~110	
GSTD		GSTD4012	4.7 x 4.2 x 1.2		4.5~10	87
		GSTD4015	4.7 x 4.2 x 1.5		6.0~11	
		GSTD4020	4.7 x 4.2 x 2.0		4.0~11.5	
		GSTD6012	7.4 x 6.9 x 1.2		2.2~11	
		GSTD6018	7.4 x 6.9 x 1.8	0.1 — 100	5.0~18	
		GSTD6030	7.4 x 6.9 x 3.0		2.5~60	
		GSTD6040	7.4 x 6.9 x 4.0		4.3~34	
		GSTD1040	12.5 x 11.0 x 4.0		2.25~90	
		GSTD1050	11.5 x 10.3 x 5.0		7.0~29	
GSTM		GSTM3012	3.7 x 3.4 x 1.2		1.4~7.2	93
		GSTM3020	3.7 x 3.4 x 2.0		1.6~9.0	
		GSTM4012	4.7 x 4.31 x 1.2		1.4~25	
		GSTM4020	4.7 x 4.31 x 2.0		1.4~35	
		GSTM5012	6.0 x 5.4 x 1.2		1.8~14.5	
		GSTM5015	6.0 x 5.4 x 1.5		2.3~16	
		GSTM5018	6.0 x 5.4 x 1.8		2.8~15	
		GSTM5020	6.0 x 5.4 x 2.0		3.4~21.3	
		GSTM5030	6.0 x 5.4 x 3.0		3.5~18	
		GSTM6012	7.3 x 6.9 x 1.2		2.5~19	
		GSTM6015	7.3 x 6.9 x 1.5		2.8~22	
		GSTM6018	7.3 x 6.9 x 1.8	0.1 — 150	3.5~22	
		GSTM6020	7.3 x 6.9 x 2.0		2.5~40	
		GSTM6024	7.3 x 6.9 x 2.4		5.0~45	
		GSTM6030	7.3 x 6.9 x 3.0		3.5~40	
		GSTM6050	7.3 x 6.9 x 5.0		5.5~30	
		GSTM1030	11.50 x 10.3 x 3.0		8.0~40	
		GSTM1040	11.50 x 10.3 x 4.0		5.0~60	
		GSTM1238	14.0 x 12.8 x 3.8		14~40	
		GSTM1250	14.0 x 12.8 x 5.0		16~80	
		GSTM1260	14.0 x 12.8 x 6.0		6.0~25	
		GSTM1265	14.0 x 12.8 x 6.5		3.5~64	
GMAR		GMAR080808	8.5 x 8.5 x 8.0		12~50	105
		GMAR121007	12.5 x 10.5 x 7.5		56	
		GMAR121008	12.5 x 10.5 x 8.6		45~48	
		GMAR121010	12.5 x 10.5 x 10.0	0.1 — 33	15~40	
		GMAR121011	12.5 x 10.5 x 11.0		10	
		GMAR151309	15.5 x 13.0 x 9.5		50~54	
		GMAR151311	15.5 x 13.0 x 11.5		8.0~45	

Contents

High Current Molding Inductor

Series Name		Part Name	Dimension (mm)	Inductance Range (uH) 0.1 1 100 1000 10000 20000	Rated Current (Amp)	Page
GMAT		GMAT121210	11.5 x 11.5 x 10.0	0.22 – 1.8	32~50	108
		GMAT121211	11.5 x 11.5 x 10.5		35	
		GMAT131210	13.0 x 12.0 x 10.0		40~60	
		GMAT131211	13.0 x 12.0 x 11.0		38	
GMBT		GMBT080808	8.8 x 8.8 x 8.0	0.2 – 4.7	12~35	111
		GMBT101010	11.0 x 11.0 x 10.0		30~60	
		GMBT121208	12.0 x 12.0 x 8.0		65~80	
		GMBT121209	12.0 x 12.0 x 9.0		45~60	
		GMBT121210	12.0 x 12.0 x 10.0		30~45	
		GMBT121212	12.0 x 12.0 x 12.0		20	
		GMBT131211	13.0 x 13.0 x 11.0		20~60	

Dip Inductor

Series Name		Part Name	Dimension (mm)	Inductance Range (uH) 0.1 1 100 1000 10000 20000	Rated Current (Amp)	Page
GAL		GAL0204	2.8 x 4.4 x 29.5	0.1 – 1000	0.02~0.7	115
		GAL0307	3.0 x 7.0 x 28.0		0.05~1.4	
		GAL0410	4.0 x 10.0 x 26.0		0.085~1.7	
		GAL0512	5.0 x 12.0 x 24.5		0.03~0.18	
GDR		GDR0406	6.0 x 7.5 x 15.0	1.0 – 4700	0.12~3.0	120
		GDR0608	8.0 x 10.0 x 15.0		0.05~3.0	
		GDR0810	10.0 x 11.5 x 15.0		0.27~4.5	
		GDR0912	11.0 x 13.5 x 15.0		0.3~5.0	
		GDR1012	12.0 x 13.5 x 15.0		0.5~6.0	
		GDR1016	12.5 x 18.0 x 15.0		0.35~9.0	
		GDR0810	10.0 x 11.5 x 15.0		0.51~10	
		GDR0912	11.0 x 13.5 x 15.0		0.8~17	
GHDR		GHDR0810	10.0 x 11.5 x 15.0	0.1 – 1000	0.51~10	127
		GHDR0912	11.0 x 13.5 x 15.0		0.6~17	
GCL		Custom Design	-		-	130

Wire Wound Chip Inductor

Series Name		Part Name	Dimension (mm)	Inductance Range (uH) 0.1 1 100 1000 10000 20000	Rated Current (Amp)	Page
GNLC		GNLC1610PR	1.8 x 1.2 x 1.0	0.39 – 1000	0.12~0.86	131
		GNLC2012PR	2.4 x 1.65 x 1.25		0.1~1.4	
		GNLC2520	2.9 x 2.54 x 2.03		0.26~2.4	
		GNLC3225	3.6 x 2.9 x 2.5		0.05~3.0	
GTLQH		GTLQH20L	2.2 x 1.8 x x 1.05	0.1 – 1000	0.38~1.7	136
		GTLQH20	2.1 x 1.5 x 1.4		0.02~4.24	
		GTLQH25L	2.7 x 2.3 x 1.05		0.49~2.0	
		GTLQH25	2.5 x 2.0 x 1.8		0.09~0.35	
		GTLQH31	3.2 x 1.6 x 1.8		0.005~0.185	
		GTLQH32L	3.2 x 2.5 x 1.75		0.07~1.48	
		GTLQH32	3.2 x 2.5 x 2.0		0.03~0.7	
		GTLQH32C	3.2 x 2.5 x 2.0		0.06~2.29	
		GTLQH43C	4.5 x 3.2 x 2.6		0.09~1.08	
		GTLQH56	5.7 x 5.0 x 4.7		0.27~6.0	

Contents

Wire Wound Chip Inductor

Series Name		Part Name	Dimension (mm)	Inductance Range (uH) 0.001 1 100 1000 10000	Rated Current (Amp)	Page
GTW		GTW2520F	2.5 x 2.0 x 1.8	0.005 — 10000	0.06~0.43	147
		GTW2520	3.0 x 2.8 x 2.3		0.12~2.0	
		GTW3225	3.2 x 2.5 x 2.2		0.05~0.45	
		GTW4532	4.5 x 3.2 x 3.2		0.03~0.8	
		GTW5650	5.6 x 5.0 x 4.0		0.025~1.8	

High Frequency Chip Inductor

Series Name		Part Name	Dimension (mm)	Inductance Range (nH) 1 100 1000 10000	Rated Current (Amp)	Page
GTC		GTC1005	1.0 x 0.5 x 0.5	1.0 — 680	0.1~0.3	153
		GTC1608	1.6 x 0.8 x 0.8		0.3	
		GTC2012	2.0 x 1.2 x 0.9		0.3	
GTCH		GTCH0603	0.6 x 0.3 x 0.3	1.0 — 270	0.06~0.47	157
		GTCH1005	1.0 x 0.5 x 0.5		0.11~0.3	
		GTCH1608	1.6 x 0.8 x 0.8		0.3	
Series Name		**Part Name**	**Dimension (mm)**	**Inductance Range (nH) 1 100 1000 10000**	**Rated Current (Amp)**	**Page**
GTH		GTH1005PA	1.27 x 0.76 x 0.61	1.0 — 10000	0.2~1.6	161
		GTH1005P	1.27 x 0.76 x 0.61		0.05~1.36	
		GTH1608P	1.8 x 1.12 x 1.02		0.08~0.7	
		GTH2012P	2.29 x 1.73 x 1.52		0.15~0.8	
		GTH2520P	2.92 x 2.8 x 2.23		0.15~1.0	

Common Mode Filter For Power Line

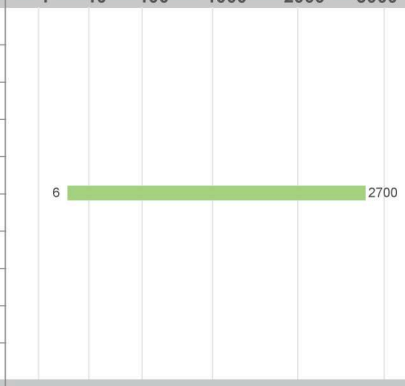
Series Name		Part Name	Dimension (mm)	Impedence Range @10Mhz (ohm) 10 100 1000 10000	Rated Current (Amp)	Page
GDLW		GDLW0502	5.1 x 5.3 x 2.5	20 — 100	1.5~5.0	167
		GDLW0504	5.1 x 5.3 x 4.8		4.5~5.0	
GCMB		Custom Design	-		-	169
GCMC		Custom Design	-		-	170
Series Name		**Part Name**	**Dimension (mm)**	**Inductance Range (uH) 0.001 1 100 1000 10000**	**Rated Current (Amp)**	**Page**
GDRH4		GDRH4-72	7.5 x 7.5 x 2.6	1.2	1.0	171

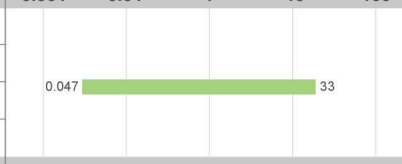
Common Mode Filter For Signal Line

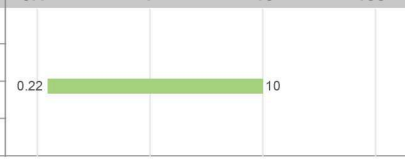
Series Name		Part Name	Dimension (mm)	Impedence Range @100Mhz (ohm) 10 100 1000 10000	Rated Current (Amp)	Page
GTHW		GTHW2012	2.0 x 1.2 x 1.2	67 — 5000	0.05~0.4	173
		GTHW3216	3.2 x 1.6 x 2.0		0.2~0.37	
		GTHW4532	4.7 x 3.4 x 3.0		0.15~0.25	
GLECM		GLECM1210	1.2 x 1.0 x 1.0	60 — 90	0.28~3.0	176
		GLECM2012	2.0 x 1.2 x 1.2		0.3~0.35	
GCMF		GCMF1210	1.2 x 1.0 x 0.9	25 — 90	0.25~3.0	180
		GCMF2012	2.0 x 1.2 x 1.2		0.3	

Contents

Multilayer Chip Bead

Series Name		Part Name	Dimension (mm)	Impedence Range (ohm) 1 10 100 1000 2000 3000	Rated Current (Amp)	Page
GBD		GBD060303	0.6 x 0.3 x 0.3		0.2	182
		GBD100505PGA	1.0 x 0.5 x 0.5		0.06~0.5	
		GBD160808PGA	1.6 x 0.8 x 0.8		0.2~0.5	
		GBD201209PGA	2.0 x 1.25 x 0.9		0.2~0.6	
		GBD100505PGB	1.0 x 0.5 x 0.5		0.05~0.3	
		GBD160808PGB	1.6 x 0.8 x 0.8		0.05~0.5	
		GBD201209PGB	2.0 x 1.25 x 0.9		0.1~0.8	
		GBD100505PGH	1.0 x 0.5 x 0.5		1.0~.12	
		GBD160808PGH	1.6 x 0.8 x 0.8		0.5~4.0	
		GBD201209PGH	2.0 x 1.25 x 0.9		1.5~6.0	

Series Name		Part Name	Dimension (mm)	Inductance Range (uH) 0.001 0.01 1 10 100	Rated Current (Amp)	Page
GBL		GBL100505	1.0 x 0.5 x 0.5		0.01~0.05	189
		GBL160808	1.6 x 0.8 x 0.8		0.001~0.05	
		GBL201209	2.0 x 1.25 x 0.9		0.03~0.3	
		GBL201212	2.0 x 1.25 x 1.25		0.005~0.03	

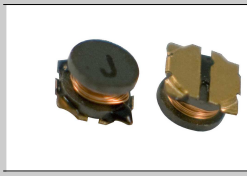
Series Name		Part Name	Dimension (mm)	Inductance Range (uH) 0.1 1 10 100	Rated Current (Amp)	Page
GBLH		GBLH160808	1.6 x 0.8 x 0.8		0.05~1.0	194
		GBLH201209	2.0 x 1.25 x 0.9		0.4~1.1	
		GBLH201609	2.0 x 1.6 x 0.9		0.9~1.7	
		GBLH252010	2.5 x 2.0 x 0.9		1.1~1.8	

Module for Wireless Charging

Series Name		Part Name	Dimension (mm)	Inductance Range (uH)	WPC PN	Page
GW Rx Type		GW483201PR-032B15YTS	48.0 x 32.0 x 1.3	13.0 +/- 8%	N/A	197
		GW443110PR-03B13YTS	44.0 x 31.0 x 1.4	9.95 +/- 0.5	N/A	
GW Tx Type		GW505006PT-11A20RTNS	50.0 x 50.0 x 6.0	24.0 +/- 8%	A1	
		GW505006PT-11A20RTN	50.0 x 50.0 x 6.0	24.0 +/- 8%	A10	
		GW505006PT-08B10RTNS	50.0 x 50.0 x 6.0	6.30 +/- 10%	A5	
		GW505006PT-08B10RTN	50.0 x 50.0 x 6.0	6.30 +/- 10%	A11	
		GW1065705P-12C12RTN	106.5 x 57.5 x 5.5	11.5 +/- 10%	A6	
		GW1065705P-12C12RTS	106.5 x 57.5 x 5.5	11.5 +/- 10%	A6	
		GW574803P-12A12RTN	57.0 x 48.5 x 3.3	11.5 +/- 10%	A6 Single	

Transformer

Series Name		Part Name	Dimension (mm)	Transformer PN	Rated Current (Amp)	Page
Power Transformer		Custom Design	-	-	-	-
Lan Transformer		Custom Design	-	-	-	



Product Series Code:	**GLK**	Brand:	GOTREND
File Version:	GLK-V3R2	Editor:	Teddy
Established Date:	2009.08.05	Description:	Low Profile Choke
Latest Edit Date:	2013.02.23		

* Features & Application:

1.Power supply PWM circuit input / output inductor
2.Power line noise suppression
3.DC-DC Converter
4.To help you go pass CE/FCC standard
5.TFT/ WiFi/ MobilePhone/ MP3/ PDA....etc. Application
6.Low Profile for all compact design

* Product Identify:

Pin Foot	EMI	Color	Made In
SMD	Unshield	Black	China / Taiwan

RoHS Compliant – SGS Test Report

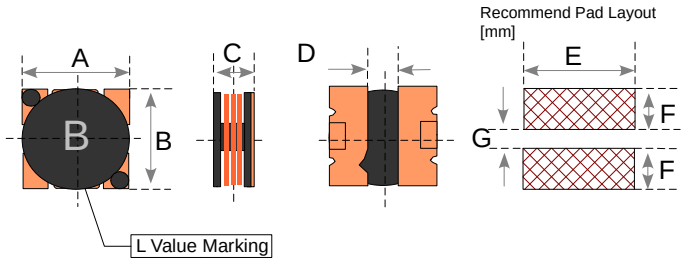
Pb	Cd	Hg	Cr+6	PBB	PBDE
<1000ppm	ND	ND	ND	ND	ND

* Part No. Example:

PN	GLK	2510	P	[ ]	-	2R2	M	[ ]
ID	1	2	3	4		5	6	7

1	GOTREND Series Code
2	Dimension Code : 2510 = (L) 2.5 x (W) 2.4 x (H) 1.0 mm
3	RoHS Compliance
4	Special Code for Series : [G] = Epoxy coating with winding
5	Inductance : 2R2 = 2.2uH Ex: 100=10uH, 101=100uH
6	Tolerance : K=10%, M=20%, N=30%
7	Special Code for specific item : S=Custom Design

* Dimensions: [mm]



Type	Size Code	A (Max)	B (Max)	C (Max)	D (Ref.)	E (Ref.)	F (Ref.)	G (Ref.)
GLK	2510	2.5	2.4	1.0	0.3	2.7	0.8	1.0
GLK	2515	2.5	2.4	1.5	0.3	2.7	0.8	1.0

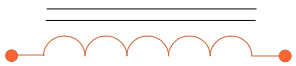
* Operating & Storage Condition:

1.Storage Condition	-40 ~ +105 ° C / RH 65 ± 10%
2.Storage Life Time	6 Months @ 20 ° C / RH 65% (no seal off)
3.Operating Condition	-40 ~ +105 ° C (Including self-temperature rise)

Attention & Caution:

* Keep out of splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condense
* Please be careful for the stress to this product by board flexure or something after the mounting.

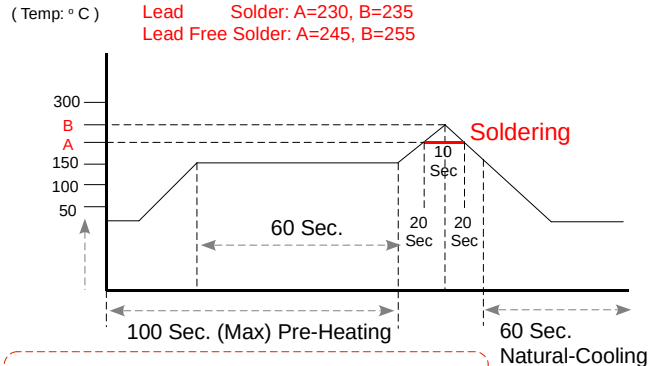
* Schematic:



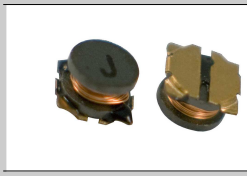
* Test Condition:

Equipment	1.L – WK3260 LCR Meter 2.RDC – Twintex TM8089A 3.IDC – WK3260+3265B DC-Bias 4.Dimension - Mitutoyo 5.Temperature – TECPEL 305A
Ambient	Temperature 20 ± 5 ° C Humidity RH 65 ± 20%
	If there may be any doubt on the test result, Measurement shall be made within the following limits:
Ambient	Temperature 25 ± 5 ° C Humidity RH 75 ± 10%

* Recommend IR Reflow Curve: GTX-IR-FILE001



Notice: Iron Soldering, Solder < 30 Watt, Direct touch the terminal x 3 Sec. Max. @350 ° C



Product Series Code:	**GLK**	Brand:	GOTREND
File Version:	GLK-V3R2	Editor:	Teddy
Established Date:	2009.08.05	Description:	Low Profile Choke
Latest Edit Date:	2013.02.23		

GOTREND PN	Inductance @ 100KHz / 0.1V (uH)	L-Tolerance	Isat-1 @ L-Drop 10% (mA / Typ.)	Isat-2 @ L-Drop 35% (mA / Typ.)	Irms @△T=40 ℃ (mA / Max.)	RDC (m Ohm / Typ.)	RDC (m Ohm / Max.)	Marking
GLK2510P-1R0□	1.00	M / N	1700	1800	1200	145.0	190.0	A
GLK2510P-1R2□	1.20	M / N	1500	1600	1150	160.0	210.0	N
GLK2510P-1R5□	1.50	M / N	1400	1450	1100	185.0	240.0	B
GLK2510P-1R8□	1.80	M / N	1300	1350	1050	200.0	260.0	C
GLK2510P-2R2□	2.20	M / N	1200	1250	1000	230.0	300.0	D
GLK2510P-2R5□	2.50	M / N	1100	1200	950	250.0	320.0	K
GLK2510P-3R3□	3.30	M / N	1050	1100	850	300.0	390.0	E
GLK2510P-4R7□	4.70	M / N	920	960	750	360.0	470.0	F
GLK2510P-5R3□	5.30	M / N	820	850	600	520.0	680.0	G
GLK2510P-6R8□	6.80	M / N	730	800	550	590.0	770.0	H
GLK2510P-8R2□	8.20	M / N	650	720	480	730.0	950.0	I
GLK2510P-100□	10.00	M	550	620	400	980.0	1250.0	J
GLK2510P-220□	22.00	M	420	450	280	1780.0	2150.0	L
GLK2510P-330□	33.00	M	320	370	200	2930.0	3500.0	P
GLK2510P-470□	47.00	M	280	310	170	3790.0	4550.0	W

- L value test frequency : @ 100KHz / 0.1V
- L-Tolerance : M = ±20% , N = ±30%
- The Isat1 is the current at which the inductance decreases by 10% from the initial value
- The Isat2 is the current at which the inductance decreases by 35% from the initial value
- The Irms is the current at which the temperature rise is △T < 40℃ ,whichever (Ta＝20℃).

GOTREND PN	Inductance @ 100KHz / 0.1V (uH)	L-Tolerance	Isat-1 @ L-Drop 10% (mA / Typ.)	Isat-2 @ L-Drop 35% (mA / Typ.)	Irms @△T=40 ℃ (mA / Max.)	RDC (m Ohm / Typ.)	RDC (m Ohm / Max.)	Marking
GLK2515P-1R0□	1.00	M / N	2330	2750	1520	74.2	89.0	A
GLK2515P-1R5□	1.50	M / N	2160	2330	1440	92.7	115.0	B
GLK2515P-2R2□	2.20	M / N	1750	1880	1080	139.5	168.0	C
GLK2515P-3R3□	3.30	M / N	1400	1540	880	211.6	254.0	D
GLK2515P-4R7□	4.70	M / N	1200	1300	840	248.9	298.0	E
GLK2515P-5R6□	5.60	M / N	1080	1200	680	339.8	408.0	F
GLK2515P-6R8□	6.80	M / N	950	1040	600	462.5	556.0	G
GLK2515P-8R2□	8.20	M / N	850	960	560	493.8	593.0	H
GLK2515P-100□	10.00	K / M	790	920	550	562.6	676.0	I
GLK2515P-120□	12.00	K / M	720	820	450	890.0	1110.0	L
GLK2515P-150□	15.00	K / M	600	700	400	980.0	1180.0	M
GLK2515P-220□	22.00	K / M	560	610	350	1193.0	1428.0	J

- L value test frequency : @ 100KHz / 0.1V
- L-Tolerance : K = ±10% , M = ±20% , N = ±30%
- The Isat1 is the current at which the inductance decreases by 10% from the initial value
- The Isat2 is the current at which the inductance decreases by 35% from the initial value
- The Irms is the current at which the temperature rise is △T < 40℃ ,whichever (Ta＝20℃).

Product Series Code	**GSDR**	Brand	GOTREND
File Version	GSDR-V6R6	Editor	Teddy
Established Date	2009.07.27	Description	SMD Ferrite DR Core Inductor
Latest Edit Date	2013.02.23		

Features & Application :

* SMD Drum Choke for power line / signal line of various size

* Low Profile even 3x3x1.4 mm and low cost

* To help you go pass the CE/FCC standard.

* Mobil Device / Handheld Device / LowProfile Device / Panel...

Part No Example :

GSDR	53	P	□	- 470	K	□
1	2	3	4	5	6	7

1. GOTREND Series : GSDR
2. Dimension Code : 5 X 5 X 3 mm
3. P = Pb < 1000 ppm
4. Unique Spec :
   [L] Low Profile
   [G] 封 EPOXY 膠
   [H] Wire grade , H = 180°C
   [M] 封 EMI 膠
5. L Value , Ex : 470 = 47 uH
6. Tolerance : K = 10% , M = 20%
7. S = Customer Design

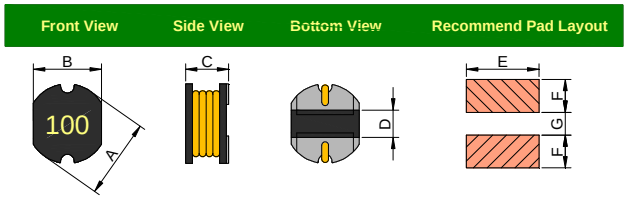
Product Structure :

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

DIMENSION : [mm]



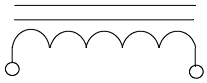
TYPE	A+/-0.3	B+/-0.3	C+/-0.3	D [ref.]	E [ref.]	F [ref.]	G [ref.]
GSDR31L	3.50	3.00	1.40 [max.]	1.20	3.20	1.45	1.00
GSDR31	3.50	3.00	1.60	1.20	3.20	1.45	1.00
GSDR32	3.50	3.00	2.00	1.20	3.20	1.45	1.00
GSDR43	4.50	4.00	3.20	1.20	4.20	1.95	1.00
GSDR52	5.80	5.20	2.50	1.20	5.60	2.60	1.00
GSDR53	5.80	5.20	3.50 [max.]	1.20	5.60	2.60	1.00
GSDR54	5.80	5.20	4.50	1.30	5.60	2.55	1.10
GSDR73	7.80	7.00	3.50	2.10	7.40	3.25	1.70
GSDR75	7.80	7.00	5.00	2.10	7.40	3.25	1.70
GSDR104	10.00+/-0.4	9.00	4.20	2.10	9.60	4.45	1.70
GSDR105	10.00+/-0.4	9.00	5.50	2.50	9.60	4.25	2.10
GSDR107	10.00+/-0.4	9.00	7.50 [max.]	2.10	9.60	4.45	1.70

Test Equipment :

* HP4284A , HP42841A - L , IDC , Q , RDC
* HP8753D NETWORK ANALYZER - SRF

Standard Atmospheric Conditions :
Ambient Temp : 20 +/- 15°C
Relative Humidity : 65 +/- 20%
If there may be any doubt on the result,
measurement shall be made within the following limits :
Ambient Temp : 25 +/- 5°C
Relative Humidity : 75 +/- 10%

Schematic:



Operatiing & Storage Condition :

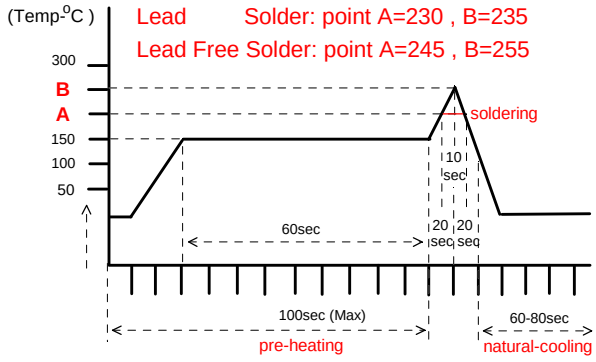
OPERATING TEMP : -40 ~ +85°C

STORAGE TEMP : -40 ~ +85°C
STORAGE LIFE TIME : 12 MONTH @25°C , RH 65%

Attention & Caution :

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exced the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260° C

Product Series Code	**GSDR**	Brand	GOTREND
File Version	GSDR-V6R6	Editor	Teddy
Established Date	2009.07.27	Description	SMD Ferrite DR Core Inductor
Latest Edit Date	2013.02.23		

L CODE	L (uH)	DCR (ohm) (max) / D.C. Current (Amp) (max)													
		GSDR 31		GSDR 31L		GSDR 32		GSDR 43		GSDR 52		GSDR 53		GSDR 54	
R10	0.1					0.020	4.50								
R50	0.5					0.020	4.20	0.011	5.50						
R82	0.82									0.040	5.00				
1R0	1.0	0.048	1.60	0.060	1.40	0.035	3.34	0.033	3.80	0.050	4.20	0.030	4.50	0.020	5.00
1R2	1.2					0.044	3.10	0.035	3.60	0.060	4.00	0.030	4.20		
1R4	1.4					0.045	3.01								
1R5	1.5	0.100	1.55			0.045	3.01	0.039	3.20	0.060	3.70	0.030	4.10	0.025	5.00
1R8	1.8					0.054	2.68	0.042	2.91	0.070	3.50	0.030	3.70	0.025	5.00
2R2	2.2	0.078	1.47	0.110	1.05	0.059	2.35	0.047	2.60	0.080	3.20	0.030	3.50	0.027	4.50
2R7	2.7					0.077	2.01	0.052	2.43	0.100	2.70	0.040	3.20	0.030	3.50
3R3	3.3	0.126	1.34	0.150	0.80	0.098	1.83	0.058	2.15	0.120	2.40	0.050	2.80	0.034	3.00
3R6	3.6													0.036	3.00
3R9	3.9	0.140	1.24			0.117	1.64	0.076	1.98	0.140	2.00	0.060	2.60		
4R7	4.7	0.158	1.22	0.210	0.75	0.137	1.50	0.094	1.70	0.150	1.80	0.070	2.50	0.040	3.00
5R6	5.6	0.186	1.09	0.250	0.65	0.157	1.36	0.101	1.60	0.160	1.50	0.080	2.40		
6R8	6.8	0.213	0.96	0.300	0.56	0.196	1.22	0.117	1.41	0.170	1.40	0.090	2.20	0.080	2.50
8R2	8.2	0.238	0.84	0.380	0.50	0.230	1.09	0.132	1.26	0.200	1.30	0.100	2.00		
100	10	0.307	0.70	0.440	0.45	0.286	0.95	0.182	1.15	0.230	1.10	0.120	1.80	0.100	1.44
120	12	0.372	0.65	0.500	0.43	0.322	0.88	0.210	1.05	0.250	1.05	0.130	1.75	0.120	1.40
150	15	0.466	0.59	0.610	0.39	0.398	0.82	0.235	0.92	0.300	1.00	0.150	1.70	0.140	1.30
180	18	0.515	0.54	0.730	0.32	0.520	0.76	0.338	0.84	0.350	0.90	0.180	1.60	0.150	1.23
220	22	0.656	0.48	0.910	0.28	0.660	0.63	0.378	0.76	0.400	0.85	0.220	1.50	0.180	1.11
270	27	0.774	0.43	1.150	0.26	0.760	0.62	0.522	0.71	0.500	0.75	0.240	1.40	0.200	0.97
330	33	1.021	0.37	1.390	0.25	0.870	0.56	0.540	0.64	0.550	0.70	0.300	1.10	0.230	0.88
390	39	1.122	0.32	1.880	0.23	1.100	0.51	0.587	0.59	0.650	0.60	0.400	1.00	0.320	0.80
470	47	1.509	0.26	2.260	0.21	1.250	0.47	0.844	0.54	0.750	0.55	0.430	0.90	0.370	0.72
560	56	1.675	0.24	2.690	0.20	1.590	0.42	0.937	0.50	0.950	0.50	0.500	0.85	0.420	0.68
680	68	1.919	0.23	3.180	0.18	1.820	0.38	1.117	0.46	1.200	0.45	0.600	0.80	0.460	0.61
820	82	2.644	0.21	3.670	0.16	2.440	0.34	1.180	0.43	1.400	0.40	0.800	0.65	0.600	0.58
101	100	2.870	0.19	4.940	0.14	2.840	0.31	1.190	0.41	1.750	0.35	0.900	0.60	0.700	0.52
121	120	4.084	0.17	5.350	0.12	3.190	0.28	1.220	0.38	2.000	0.25	1.000	0.58	0.930	0.48
151	150	4.774	0.16			4.200	0.16	1.400	0.35	2.600	0.22	1.300	0.43	1.100	0.40
181	180	5.699	0.14			5.110	0.15	1.850	0.31	3.000	0.20	1.500	0.41	1.380	0.38
221	220	9.000	0.12			7.310	0.14	2.156	0.29	3.700	0.18	2.000	0.38	1.570	0.35
271	270					8.240	0.12	2.890	0.26	4.000	0.19	2.500	0.35		
331	330					10.190	0.10	3.760	0.20	4.200	0.20	3.200	0.28	2.200	0.30
391	390							5.500	0.17						
471	470							7.200	0.15					2.800	0.23
531	530														
561	560											4.500	0.25	3.000	0.20
681	680													3.500	0.18
821	820														
102	1000	34.000	0.07					11.500	0.08			6.950	0.220	6.240	0.15
122	1200	35.000	0.057												
152	1500														
182	1800														
202	2000														
252	2500														
302	3000														
532	5300														
103	10000														
153	15000														

■ Measuring Freq. : 100KHz / Test Instrument: HP4284A
■ L Value Tolerance : <1.0 uH = 30% ; 1.0~8.2uH = 20% ; 10uH~15000uH = 10% / 20%
■ D.C. Current : Base on L drop 10% max. & Temp. rise up 40 deg.C max.

Product Series Code	**GSDR**	Brand	GOTREND
File Version	GSDR-V6R6	Editor	Teddy
Established Date	2009.07.27	Description	SMD Ferrite DR Core Inductor
Latest Edit Date	2013.02.23		

L CODE	L (uH)	DCR (ohm) (max) / D.C. Current (Amp) (max)									
		GSDR 73		GSDR 75		GSDR 104		GSDR 105		GSDR 107	
R10	0.1										
1R0	1.0	0.018	7.00	0.013	7.50	0.012	8.70			0.008	9.50
1R2	1.2			0.015	7.20	0.014	8.00	0.009	8.63		
1R4	1.4					0.016	7.48				
1R5	1.5	0.020	6.00	0.016	6.50	0.016	7.48	0.012	8.00		
1R8	1.8			0.020	6.00	0.018	6.80			0.011	8.60
2R2	2.2	0.023	5.00	0.023	5.30	0.020	5.40	0.016	7.20	0.012	8.00
2R7	2.7					0.024	3.20				
3R3	3.3	0.025	4.00	0.028	4.50	0.028	2.85	0.018	6.50	0.016	6.80
3R9	3.9			0.030	4.20	0.030	2.80			0.017	6.35
4R7	4.7	0.039	3.50	0.045	4.00	0.038	2.75	0.020	5.50	0.019	5.45
5R6	5.6			0.048	3.60	0.040	2.70			0.024	4.30
6R8	6.8	0.040	2.80	0.058	3.20	0.042	2.65	0.040	4.50	0.035	3.52
8R2	8.2			0.070	2.80	0.048	2.60			0.045	3.51
100	10	0.080	1.44	0.070	2.30	0.050	2.38	0.060	2.60	0.060	3.50
120	12	0.090	1.39	0.080	2.00	0.060	2.13	0.070	1.94	0.070	3.40
150	15	0.100	1.24	0.090	1.80	0.070	1.87	0.070	1.72	0.080	3.10
180	18	0.110	1.12	0.100	1.60	0.080	0.73	0.080	1.58	0.090	3.00
220	22	0.130	1.07	0.110	1.50	0.090	1.60	0.080	1.42	0.100	2.60
270	27	0.150	0.94	0.120	1.30	0.100	1.44	0.100	1.32	0.110	2.40
330	33	0.170	0.85	0.130	1.20	0.120	1.26	0.110	1.16	0.120	2.30
390	39	0.220	0.74	0.160	1.10	0.150	1.20	0.120	1.10	0.140	2.10
470	47	0.250	0.68	0.180	1.10	0.170	1.10	0.140	1.00	0.170	1.95
560	56	0.280	0.64	0.240	0.94	0.200	1.01	0.190	0.93	0.190	1.85
680	68	0.330	0.59	0.280	0.85	0.220	0.91	0.210	0.85	0.220	1.65
820	82	0.410	0.54	0.370	0.78	0.250	0.85	0.280	0.79	0.250	1.50
101	100	0.480	0.51	0.430	0.72	0.340	0.74	0.340	0.72	0.350	1.40
121	120	0.540	0.49	0.470	0.66	0.400	0.69	0.370	0.63	0.400	1.30
151	150	0.750	0.40	0.640	0.58	0.540	0.61	0.510	0.55	0.470	1.20
181	180	1.020	0.36	0.710	0.51	0.620	0.56	0.570	0.50	0.630	1.00
221	220	1.200	0.31	0.960	0.49	0.720	0.53	0.780	0.47	0.730	0.95
271	270	1.310	0.29	1.110	0.42	0.950	0.45	0.870	0.41	0.970	0.90
331	330	1.500	0.28	1.260	0.40	1.100	0.42	1.200	0.37	1.150	0.80
391	390			1.770	0.36	1.240	0.38	1.340	0.35	1.300	0.75
471	470			1.960	0.34	1.530	0.35	1.500	0.33	1.480	0.65
531	530									1.700	0.62
561	560					1.900	0.32	1.900	0.33	1.900	0.60
681	680			2.480	0.30			2.250	0.28	2.250	0.50
821	820			3.400	0.30			2.550	0.24	2.550	0.48
102	1000			5.000	0.17					3.000	0.46
122	1200			5.000	0.17					3.500	0.35
152	1500			5.520	0.16						
182	1800			6.050	0.15						
202	2000			7.280	0.14						
252	2500			9.680	0.11						
302	3000			13.200	0.10						
532	5300			24.000	0.08						
103	10000							31.000	0.15		
153	15000									41.000	0.12

■ Measuring Freq. : 100KHz / Test Instrument: HP4284A
■ L Value Tolerance : <1.0 uH = 30% ; 1.0~8.2uH = 20% ; 10uH~15000uH = 10% / 20%
■ D.C. Current : Base on L drop 10% max. & Temp. rise up 40 deg.C max.

Product Series Code	**GSDRT**	Brand	GOTREND
File Version	GSDRT-V1R7	Editor	Teddy
Established Date	2009.08.18	Description	SMD Ferrite DR Core Inductor
Latest Edit Date	2013.02.23		

Features & Application:

* SMD Drum Choke for power line / signal line of various size

* Low Profile even 2.6x2.8x1.1 mm and low cost

* To help you go pass the CE/FCC standard.

* Mobile Device / Handheld Device / LowProfile Device / Panel...

Part No Example:

GSDRT	5412	P	-	6R8	M
1	2	3		4	5

1. GOTREND Series : GSDRT
2. Dimension Code : 5.6X5.6X1.2 mm
3. P = Pb free < 1000ppm
4. [L] Value Ex : 6R8 = 6.8uH
5. Tolerance : M = 20%

Custom Design Spec: @ 1KHz,0.25V			
P/N	Inductance	RDC (max)	IDC(max)

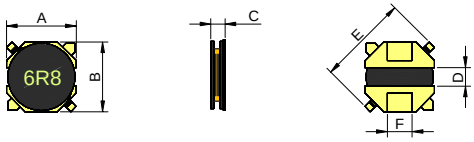
Product Structure

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

DIMENSION : [mm]



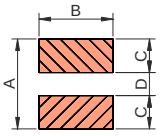
TYPE	A+/-0.3	B+/-0.3	C [max.]	D [ref.]	E [max.]	F [ref.]
GSDRT2610	2.60[+/-0.2]	2.80[+/-0.2]	1.00	0.50	3.82	0.80
GSDRT2810	3.00[+/-0.2]	3.00[+/-0.2]	1.00	0.75	4.25	0.90
GSDRT3014	3.20	3.20	1.40	0.70	4.50	1.00
GSDRT3512	3.70	3.70	1.20	0.70	5.20	1.00
GSDRT3515	3.70	3.70	1.50	0.70	5.20	1.00
GSDRT3518	3.70	3.70	1.80	0.70	5.20	1.00
GSDRT5410	5.60	5.60	1.05	1.50	7.90	1.80
GSDRT5412	5.60	5.60	1.20	1.50	7.90	1.80
GSDRT5419	5.60	5.60	1.90	1.50	7.90	1.80
GSDRT7012	7.20	7.20	1.25	2.00	10.18	2.20
GSDRT7015	7.20	7.20	1.50	2.00	10.18	2.20
GSDRT7018	7.20	7.20	1.80	2.00	10.18	2.20
GSDRT7020	7.20	7.20	2.00	2.00	10.18	2.20

Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15ºC
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5ºC
Relative Humidity:75+/-10%

COMMEND LAYOUT : [mm]



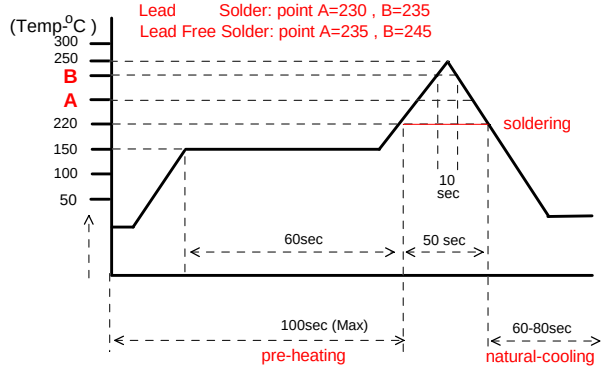
Land Pattern	TYPE	A [ref.]	B [ref.]	C [ref.]	D [ref.]
	GSDRT2610	3.40	1.20	1.20	1.00
	GSDRT2810	3.40	1.00	1.20	1.00
	GSDRT3014	3.80	1.40	1.20	1.40
	GSDRT3512	3.90	1.20	1.45	1.00
	GSDRT3515	3.90	1.20	1.45	1.00
	GSDRT3518	3.90	1.20	1.45	1.00
	GSDRT5410	6.00	2.50	1.75	2.50
	GSDRT5412	6.00	2.50	1.75	2.50
	GSDRT5419	6.00	2.50	1.75	2.50
	GSDRT7012	8.00	3.00	2.25	3.50
	GSDRT7015	8.00	3.00	2.25	3.50
	GSDRT7018	8.00	3.00	2.25	3.50
	GSDRT7020	8.00	3.00	2.25	3.50

Operating & Storage Condition:

OPERATING TEMP:-40~+85ºC

STORAGE TEMP:-40~+85ºC
STORAGE LIFE TIME: 12 MONTH @25ºC , RH 65%

Recommand Reflow Curve (TIME:Second)



Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Part NO.	Inductance (uH)	Tolerance (± %)	Isat (A) max.	Irms (A) max.	DC Resistance(ohm) max.	L -Test Freq. (KHz)	Marking
GSDRT2610P-1R0N	1.00	30%	1.40	1.55	0.110	0.1V / 100	A
GSDRT2610P-2R2M	2.20	20%	1.00	1.28	0.215	0.1V / 100	D
GSDRT2610P-3R3M	3.30	20%	0.85	0.98	0.263	0.1V / 100	F
GSDRT2610P-4R7M	4.70	20%	0.70	0.86	0.338	0.1V / 100	H
GSDRT2610P-6R8M	6.80	20%	0.61	0.73	0.544	0.1V / 100	J
GSDRT2610P-100M	10.00	20%	0.45	0.52	0.800	0.1V / 100	L
GSDRT2610P-150M	15.00	20%	0.40	0.43	1.028	0.1V / 100	N
GSDRT2610P-220M	22.00	20%	0.33	0.32	1.813	0.1V / 100	O
GSDRT2610P-270M	27.00	20%	0.28	0.29	1.604	0.1V / 100	Y
GSDRT2610P-330M	33.00	20%	0.23	0.28	1.798	0.1V / 100	P

* Isat = Current loading caused L value drop approximately 10%
**Irms =Current loading caused the parts Tempereture rise about 40° C

Part NO.	Inductance (uH)	Tolerance (± %)	Isat (A) max.	Irms (A) max.	DC Resistance(ohm) max.	L -Test Freq. (KHz)	Marking
GSDRT2810P-1R0N	1.00	30%	1.15	2.00	0.073	0.1V / 100	A
GSDRT2810P-1R5N	1.50	30%	1.00	1.70	0.088	0.1V / 100	B
GSDRT2810P-2R2N	2.20	30%	0.80	1.32	0.132	0.1V / 100	D
GSDRT2810P-3R3N	3.30	30%	0.65	1.05	0.252	0.1V / 100	F
GSDRT2810P-4R7N	4.70	30%	0.53	0.87	0.288	0.1V / 100	H
GSDRT2810P-6R8N	6.80	30%	0.45	0.83	0.348	0.1V / 100	J
GSDRT2810P-100M	10.00	20%	0.39	0.67	0.576	0.1V / 100	L
GSDRT2810P-120M	12.00	20%	0.38	0.50	0.565	0.1V / 100	M
GSDRT2810P-150M	15.00	20%	0.32	0.49	0.852	0.1V / 100	N
GSDRT2810P-220M	22.00	20%	0.27	0.38	1.440	0.1V / 100	O
GSDRT2810P-330M	33.00	20%	0.23	0.29	1.530	0.1V / 100	P
GSDRT2810P-470M	47.00	20%	0.20	0.25	2.000	0.1V / 100	Q
GSDRT2810P-R68N	0.68	30%	1.70	1.90	0.047	0.1V / 100	A
GSDRT2810P-5R6N	5.60	30%	0.50	0.75	0.261	0.1V / 100	I

* Isat = Current loading caused L value drop approximately 10%
**Irms =Current loading caused the parts Tempereture rise about 40° C

Product Series Code	**GSDRT**	Brand	GOTREND
File Version	GSDRT-V1R7	Editor	Teddy
Established Date	2009.08.18	Description	SMD Ferrite DR Core Inductor
Latest Edit Date	2013.02.23		

Part NO.	Inductance (uH)	Tolerance (± %)	Isat (A) max.	Irms (A) max.	DC Resistance(ohm) max.	L -Test Freq. (KHz)
GSDRT3512P-2R2M	2.20	20%	1.00	1.65	0.114	0.1V / 100
GSDRT3512P-3R3M	3.30	20%	0.90	1.45	0.169	0.1V / 100
GSDRT3512P-4R7M	4.70	20%	0.80	1.11	0.238	0.1V / 100
GSDRT3512P-5R6M	5.60	20%	0.78	0.98	0.265	0.1V / 100
GSDRT3512P-6R8M	6.80	20%	0.70	0.93	0.313	0.1V / 100
GSDRT3512P-100M	10.00	20%	0.55	0.75	0.454	0.1V / 100
GSDRT3512P-150M	15.00	20%	0.50	0.59	0.715	0.1V / 100
GSDRT3512P-220M	22.00	20%	0.40	0.54	0.899	0.1V / 100
GSDRT3512P-470M	47.00	20%	0.20	0.35	2.116	0.1V / 100
GSDRT3512P-101M	100.00	20%	0.22	0.24	3.837	0.1V / 100
GSDRT3512P-221M	220.00	20%	0.13	0.15	8.633	0.1V / 100

Part NO.	Inductance (uH)	Tolerance (± %)	Isat (A) max.	Irms (A) max.	DC Resistance(ohm) max.	L -Test Freq. (KHz)	Marking
GSDRT3014P-1R0M	1.00	20%	2.10	1.70	0.106	0.1V / 100	A
GSDRT3014P-1R5M	1.50	20%	2.00	1.40	0.144	0.1V / 100	B
GSDRT3014P-2R2M	2.20	20%	1.60	1.30	0.184	0.1V / 100	D
GSDRT3014P-3R3M	3.30	20%	1.40	1.20	0.232	0.1V / 100	F
GSDRT3014P-4R7M	4.70	20%	1.20	0.90	0.348	0.1V / 100	H
GSDRT3014P-6R8M	6.80	20%	0.92	0.80	0.427	0.1V / 100	J
GSDRT3014P-8R2M	8.20	20%	0.90	0.65	0.594	0.1V / 100	K
GSDRT3014P-100M	10.00	20%	0.80	0.60	0.656	0.1V / 100	L
GSDRT3014P-150M	15.00	20%	0.68	0.55	0.835	0.1V / 100	N
GSDRT3014P-220M	22.00	20%	0.56	0.45	1.130	0.1V / 100	O
GSDRT3014P-330M	33.00	20%	0.51	0.40	1.517	0.1V / 100	P
GSDRT3014P-470M	47.00	20%	0.40	/	2.000	0.1V / 100	/
GSDRT3014P-101M	100.00	20%	0.28	0.20	4.850	0.1V / 100	S

* Isat = Current loading caused L value drop approximately 10%
**Irms =Current loading caused the parts Tempereture rise about 40° C

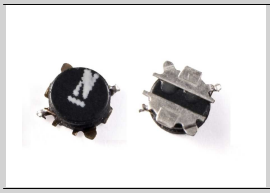
Product Series Code	**GSDRT**	Brand	GOTREND
File Version	GSDRT-V1R7	Editor	Teddy
Established Date	2009.08.18	Description	SMD Ferrite DR Core Inductor
Latest Edit Date	2013.02.23		

Part NO.	Inductance (uH)	Tolerance (± %)	Isat (A) max.	Irms (A) max.	DC Resistance(ohm) max.	L -Test Freq. (KHz)
GSDRT3515P-2R2M	2.20	20%	1.90	1.90	0.086	0.1V / 100
GSDRT3515P-3R3M	3.30	20%	1.70	1.70	0.118	0.1V / 100
GSDRT3515P-4R7M	4.70	20%	1.40	1.35	0.178	0.1V / 100
GSDRT3515P-5R6M	5.60	20%	1.30	1.00	0.195	0.1V / 100
GSDRT3515P-6R8M	6.80	20%	1.20	0.96	0.242	0.1V / 100
GSDRT3515P-100M	10.00	20%	0.90	0.88	0.343	0.1V / 100
GSDRT3515P-150M	15.00	20%	0.70	0.70	0.503	0.1V / 100
GSDRT3515P-220M	22.00	20%	0.60	0.60	0.746	0.1V / 100
GSDRT3515P-330M	33.00	20%	0.50	0.47	1.176	0.1V / 100
GSDRT3515P-470M	47.00	20%	0.40	0.38	1.747	0.1V / 100
GSDRT3515P-221M	220.00	20%	0.21	0.18	7.502	0.1V / 100

* Isat = Current loading caused L value drop approximately 10%
**Irms =Current loading caused the parts Tempereture rise about 40º C

Part NO.	Inductance (uH)	Tolerance (± %)	Isat (A) max.	Irms (A) max.	DC Resistance(ohm) max.	L -Test Freq. (KHz)
GSDRT3518P-1R0N	1.00	30%	2.80	3.00	0.035	0.1V / 100
GSDRT3518P-2R2M	2.20	20%	1.95	2.15	0.062	0.1V / 100
GSDRT3518P-3R3M	3.30	20%	1.53	1.74	0.094	0.1V / 100
GSDRT3518P-4R7M	4.70	20%	1.40	1.63	0.126	0.1V / 100
GSDRT3518P-8R2M	8.20	20%	0.80	1.16	0.179	0.1V / 100
GSDRT3518P-6R8M	6.80	20%	1.13	1.35	0.187	0.1V / 100
GSDRT3518P-100M	10.00	20%	0.90	1.02	0.289	0.1V / 100
GSDRT3518P-150M	15.00	20%	0.75	0.80	0.402	0.1V / 100
GSDRT3518P-220M	22.00	20%	0.65	0.69	0.540	0.1V / 100
GSDRT3518P-330M	33.00	20%	0.50	0.48	0.888	0.1V / 100
GSDRT3518P-470M	47.00	20%	0.38	0.46	1.129	0.1V / 100
GSDRT3518P-101M	100.00	20%	0.25	0.34	1.856	0.1V / 100
GSDRT3518P-221M	220.00	20%	0.16	0.20	5.322	0.1V / 100

* Isat = Current loading caused L value drop approximately 10%
**Irms =Current loading caused the parts Tempereture rise about 40º C



Product Series Code	**GSDRT**	Brand	GOTREND
File Version	GSDRT-V1R7	Editor	Teddy
Established Date	2009.08.18	Description	SMD Ferrite DR Core Inductor
Latest Edit Date	2013.02.23		

Part NO.	Inductance (uH)	Tolerance (± %)	Isat (A) max.	Irms (A) max.	DC Resistance(ohm) max.	L -Test Freq. (KHz)
GSDRT5410P-3R3M	3.30	20%	1.30	1.65	0.150	0.1V / 100
GSDRT5410P-4R7M	4.70	20%	1.10	1.31	0.196	0.1V / 100
GSDRT5410P-6R8M	6.80	20%	0.90	1.08	0.275	0.1V / 100
GSDRT5410P-100M	10.00	20%	0.80	0.86	0.404	0.1V / 100
GSDRT5410P-150M	15.00	20%	0.65	0.72	0.587	0.1V / 100
GSDRT5410P-220M	22.00	20%	0.52	0.65	0.881	0.1V / 100
GSDRT5410P-330M	33.00	20%	0.42	0.54	1.266	0.1V / 100
GSDRT5410P-470M	47.00	20%	0.36	0.43	1.807	0.1V / 100

* Isat = Current loading caused L value drop approximately 10%
**Irms =Current loading caused the parts Tempereture rise about 40° C

Part NO.	Inductance (uH)	Tolerance (± %)	Isat (A) max.	Irms (A) max.	DC Resistance(ohm) max.	L -Test Freq. (KHz)
GSDRT5412P-2R2M	2.20	20%	1.40	1.95	0.086	0.1V / 100
GSDRT5412P-3R3M	3.30	20%	1.18	1.85	0.103	0.1V / 100
GSDRT5412P-4R7M	4.70	20%	0.90	1.60	0.143	0.1V / 100
GSDRT5412P-6R8M	6.80	20%	0.73	1.35	0.199	0.1V / 100
GSDRT5412P-100M	10.00	20%	0.62	1.12	0.276	0.1V / 100
GSDRT5412P-150M	15.00	20%	0.50	0.90	0.408	0.1V / 100
GSDRT5412P-220M	22.00	20%	0.41	0.80	0.551	0.1V / 100
GSDRT5412P-330M	33.00	20%	0.39	0.68	0.768	0.1V / 100
GSDRT5412P-470M	47.00	20%	0.32	0.55	1.709	0.1V / 100

* Isat = Current loading caused L value drop approximately 10%
**Irms =Current loading caused the parts Tempereture rise about 40° C

Part NO.	Inductance (uH)	Tolerance (± %)	Isat (A) max.	Irms (A) max.	DC Resistance(ohm) max.	L -Test Freq. (KHz)
GSDRT5419P-1R5M	1.50	20%	4.50	3.50	0.040	0.1V / 100
GSDRT5419P-2R2M	2.20	20%	3.70	2.90	0.052	0.1V / 100
GSDRT5419P-3R3M	3.30	20%	2.90	2.40	0.068	0.1V / 100
GSDRT5419P-4R7M	4.70	20%	2.70	2.20	0.091	0.1V / 100
GSDRT5419P-6R8M	6.80	20%	2.20	1.80	0.136	0.1V / 100
GSDRT5419P-8R2M	8.20	20%	1.90	1.52	0.158	0.1V / 100
GSDRT5419P-100M	10.00	20%	1.50	1.50	0.184	0.1V / 100
GSDRT5419P-150M	15.00	20%	1.40	1.15	0.277	0.1V / 100
GSDRT5419P-220M	22.00	20%	1.15	0.97	0.374	0.1V / 100
GSDRT5419P-330M	33.00	20%	0.97	0.76	0.574	0.1V / 100
GSDRT5419P-470M	47.00	20%	0.81	0.65	0.844	0.1V / 100

* Isat = Current loading caused L value drop approximately 10%
**Irms =Current loading caused the parts Tempereture rise about 40° C

Product Series Code	**GSDRT**	Brand	GOTREND
File Version	GSDRT-V1R7	Editor	Teddy
Established Date	2009.08.18	Description	SMD Ferrite DR Core Inductor
Latest Edit Date	2013.02.23		

Part NO.	Inductance (uH)	Tolerance (± %)	Isat (A) max.	Irms (A) max.	DC Resistance(ohm) max.	L -Test Freq. (KHz)
GSDRT7012P-4R7M	4.70	20%	1.42	1.60	0.156	0.1V / 100
GSDRT7012P-6R8M	6.80	20%	1.11	1.32	0.203	0.1V / 100
GSDRT7012P-100M	10.00	20%	0.95	1.25	0.242	0.1V / 100
GSDRT7012P-150M	15.00	20%	0.75	0.90	0.412	0.1V / 100
GSDRT7012P-220M	22.00	20%	0.60	0.75	0.586	0.1V / 100
GSDRT7012P-330M	33.00	20%	0.50	0.57	0.853	0.1V / 100
GSDRT7012P-470M	47.00	20%	0.45	0.54	1.046	0.1V / 100

* Isat = Current loading caused L value drop approximately 10%
**Irms =Current loading caused the parts Tempereture rise about 40° C

Part NO.	Inductance (uH)	Tolerance (± %)	Isat (A) max.	Irms (A) max.	DC Resistance(ohm) max.	L -Test Freq. (KHz)
GSDRT7015P-2R2M	2.20	20%	2.50	2.70	0.050	0.1V / 100
GSDRT7015P-3R3M	3.30	20%	2.00	2.50	0.061	0.1V / 100
GSDRT7015P-4R7M	4.70	20%	1.80	2.05	0.085	0.1V / 100
GSDRT7015P-6R8M	6.80	20%	1.40	1.70	0.145	0.1V / 100
GSDRT7015P-100M	10.00	20%	1.20	1.40	0.196	0.1V / 100
GSDRT7015P-150M	15.00	20%	0.95	1.20	0.265	0.1V / 100
GSDRT7015P-220M	22.00	20%	0.75	1.00	0.365	0.1V / 100
GSDRT7015P-330M	33.00	20%	0.62	0.73	0.581	0.1V / 100
GSDRT7015P-470M	47.00	20%	0.50	0.70	0.743	0.1V / 100

* Isat = Current loading caused L value drop approximately 10%
**Irms =Current loading caused the parts Tempereture rise about 40° C

Part NO.	Inductance (uH)	Tolerance (± %)	Isat (A) max.	Irms (A) max.	DC Resistance(ohm) max.	L -Test Freq. (KHz)
GSDRT7018P-4R7M	4.70	20%	2.50	2.50	0.070	0.25V / 100
GSDRT7018P-6R8M	6.80	20%	2.00	2.00	0.101	0.25V / 100
GSDRT7018P-100M	10.00	20%	1.70	1.71	0.149	0.25V / 100
GSDRT7018P-150M	15.00	20%	1.30	1.35	0.227	0.25V / 100
GSDRT7018P-180M	18.00	20%	1.20	1.28	0.265	0.25V / 100
GSDRT7018P-220M	22.00	20%	1.15	1.10	0.326	0.25V / 100
GSDRT7018P-270M	27.00	20%	1.05	0.97	0.386	0.25V / 100
GSDRT7018P-330M	33.00	20%	0.95	0.90	0.462	0.25V / 100
GSDRT7018P-390M	39.00	20%	0.87	0.81	0.571	0.25V / 100

* Isat = Current loading caused L value drop approximately 10%
**Irms =Current loading caused the parts Tempereture rise about 40° C

Part NO.	Inductance (uH)	Tolerance (± %)	Isat (A) max.	Irms (A) max.	DC Resistance(ohm) max.	L -Test Freq. (KHz)
GSDRT7020P-2R2M	2.20	20%	4.60	3.00	0.050	0.1V / 100
GSDRT7020P-3R3M	3.30	20%	4.00	2.20	0.070	0.1V / 100
GSDRT7020P-4R7M	4.70	20%	3.50	2.00	0.096	0.1V / 100
GSDRT7020P-6R8M	6.80	20%	2.70	1.75	0.120	0.1V / 100
GSDRT7020P-100M	10.00	20%	2.00	1.40	0.186	0.1V / 100
GSDRT7020P-150M	15.00	20%	1.50	1.10	0.254	0.1V / 100
GSDRT7020P-220M	22.00	20%	1.30	1.07	0.306	0.1V / 100
GSDRT7020P-330M	33.00	20%	1.20	0.85	0.500	0.1V / 100
GSDRT7020P-470M	47.00	20%	1.00	0.75	0.692	0.1V / 100

* Isat = Current loading caused L value drop approximately 10%
**Irms =Current loading caused the parts Tempereture rise about 40° C

Product Series Code	**GDO**	Brand	GOTREND
File Version	GDO-V3R0	Editor	Teddy
Established Date	2009.08.04	Description	Ferrite Core With Plastic Base Inductor
Latest Edit Date	2013.02.23		

Features & Application:

* High-Current SMT Drum Choke for PWM circuit
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* Mobile Device / Handheld Device / LowProfile Device / Panel...

Product Structure

SMD	DIP	Shield	Unshield

2005 RoHS Compliant - SGS Certified Result

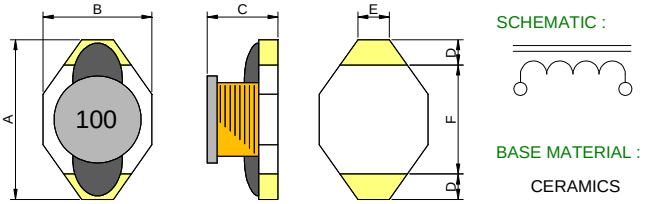
鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example:

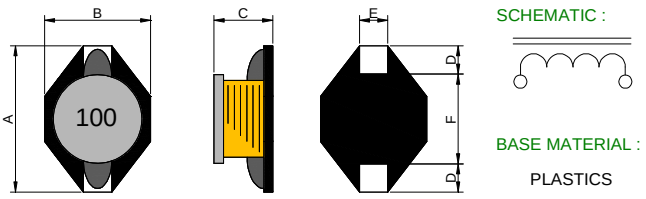
GDO	0802	P - 680	M
1	2	3 4	5

1. GOTREND Series: GDO
2. Size Code : 0802
3. P=Pb free < 1000ppm
4. [L] Value : Inductance 680=68uH
5. Tolerance: M=+/-20%

DIMENSION : [mm]



TYPE	A (max)	B (max)	C (max)	D +/-0.3	E +/-0.3	F
0402	6.60	4.45	2.92	1.00	1.02	4.40 +/-0.5



TYPE	A (max)	B (max)	C (max)	D +/-0.3	E +/-0.3	F
0802	12.33	9.30	3.00	2.60 typ	1.20	7.20 +/-1.0
0804	12.95	9.40	5.21	2.50	2.50	7.20 +/-1.0
0810	12.95	9.40	11.43	2.50	2.50	7.20 +/-1.0
1306	18.54	15.24	7.11	2.50	2.50	12.70 +/-1.0

Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15°C
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:75+/-10%

Operating & Storage Condition:

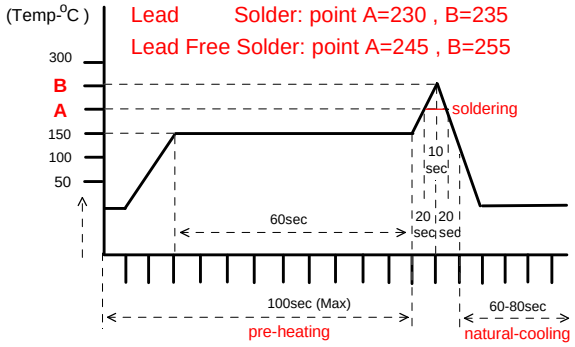
OPERATING TEMP:-40~+85°C

STORAGE TEMP:-40~+85°C
STORAGE LIFE TIME: 12 MONTH @25°C , RH 65%

Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260 °C

Product Series Code	**GDO**	Brand	GOTREND
File Version	GDO-V3R0	Editor	Teddy
Established Date	2009.08.04	Description	Ferrite Core With Plastic Base Inductor
Latest Edit Date	2013.02.23		

Part No.	L (uH) +/-20%	DCR (Ohm) max.	SRF (MHz) typ.	Isat (A) typ.	Irms (A) typ.
0402P-1R0M	1.00	0.05	130.0	2.90	2.90
0402P-1R5M	1.50	0.05	115.0	2.60	2.80
0402P-2R2M	2.20	0.07	90.0	2.30	2.40
0402P-2R7M	2.70	0.07	80.0	2.20	2.20
0402P-3R3M	3.30	0.08	70.0	2.00	2.00
0402P-4R7M	4.70	0.09	50.0	1.50	1.50
0402P-6R8M	6.80	0.13	45.0	1.20	1.40
0402P-100M	10.00	0.16	35.0	1.10	1.30
0402P-150M	15.00	0.23	30.0	0.90	1.20
0402P-220M	22.00	0.37	20.0	0.70	0.80
0402P-330M	33.00	0.51	15.0	0.58	0.60
0402P-470M	47.00	0.64	14.0	0.50	0.50
0402P-680M	68.00	0.86	11.0	0.40	0.40
0402P-101M	100.00	1.27	9.0	0.31	0.30
0402P-151M	150.00	2.00	6.0	0.27	0.25
0402P-221M	220.00	3.11	5.5	0.22	0.20
0402P-331M	330.00	3.80	5.0	0.18	0.16
0402P-471M	470.00	5.06	4.0	0.16	0.15
0402P-681M	680.00	9.20	3.0	0.14	0.12
0402P-102M	1000.0	13.80	2.0	0.10	0.07

Part No.	L (uH) +/-20%	DCR (Ohm) max.	SRF (MHz) typ.	Isat (A) typ.	Irms (A) typ.
0802P-100M	10.00	0.11	35.0	2.40	2.00
0802P-150M	15.00	0.15	33.0	2.00	1.50
0802P-220M	22.00	0.23	25.0	1.60	1.30
0802P-330M	33.00	0.30	19.0	1.40	1.10
0802P-470M	47.00	0.39	14.0	1.00	0.80
0802P-680M	68.00	0.66	12.0	0.90	0.70
0802P-101M	100.00	0.84	10.0	0.70	0.60
0802P-151M	150.00	1.20	8.0	0.60	0.50
0802P-221M	220.00	1.90	6.0	0.50	0.40
0802P-331M	330.00	2.70	5.0	0.40	0.30
0802P-471M	470.00	4.00	4.0	0.30	0.20
0802P-681M	680.00	5.30	3.0	0.20	0.10
0802P-102M	1000.00	8.40	2.5	0.10	0.05

Part No.	L (uH) +/-20%	DCR (Ohm) max.	SRF (MHz) typ.	Isat (A) typ.	Irms (A) typ.
0804P-1R0M	1.00	0.009	100.0	9.00	6.80
0804P-1R5M	1.50	0.010	90.0	8.00	6.40
0804P-2R2M	2.20	0.012	80.0	7.00	6.10
0804P-3R3M	3.30	0.015	65.0	6.40	5.40
0804P-4R7M	4.70	0.018	45.0	5.40	4.80
0804P-6R8M	6.80	0.027	38.0	4.60	4.40
0804P-100M	10.00	0.038	30.0	3.80	3.90
0804P-150M	15.00	0.046	27.0	3.00	3.10
0804P-220M	22.00	0.085	19.0	2.60	2.70
0804P-330M	33.00	0.100	15.0	2.00	2.10
0804P-470M	47.00	0.140	12.0	1.60	1.80
0804P-680M	68.00	0.200	10.0	1.40	1.50
0804P-101M	100.00	0.280	9.0	1.20	1.30
0804P-151M	150.00	0.400	6.0	1.00	1.00
0804P-221M	220.00	0.610	5.0	0.80	0.80
0804P-331M	330.00	1.020	4.5	0.60	0.60
0804P-471M	470.00	1.270	3.5	0.50	0.50
0804P-681M	680.00	2.020	2.5	0.40	0.40
0804P-102M	1000.0	3.000	2.0	0.30	0.30

Part No.	L (uH) +/-20%	DCR (Ohm) max.	SRF (MHz) typ.	Isat (A) typ.	Irms (A) typ.
0810P-1R0N	1.00	0.009	30.0	16.00	9.20
0810P-1R2N	1.20	0.009	/	15.00	9.00
0810P-1R5M	1.50	0.010	28.0	15.00	8.00
0810P-2R0M	2.00	0.012	27.0	14.00	7.00
0810P-2R2M	2.20	0.012	27.0	14.00	7.00
0810P-3R3M	3.30	0.013	26.0	12.00	6.00
0810P-4R7M	4.70	0.018	25.0	10.00	4.00
0810P-6R3M	6.30	0.038	25.0	10.00	3.80
0810P-6R8M	6.80	0.039	23.0	9.00	3.60
0810P-8R2M	8.20	0.040	22.5	8.00	3.60
0810P-100M	10.00	0.040	22.0	8.00	3.50
0810P-150M	15.00	0.050	18.0	7.00	3.00
0810P-220M	22.00	0.070	11.0	5.50	2.50
0810P-270M	27.00	0.075	10.0	5.00	2.30
0810P-330M	33.00	0.080	9.0	4.00	2.00
0810P-470M	47.00	0.110	8.0	3.80	1.60
0810P-680M	68.00	0.170	7.0	3.00	1.20
0810P-101M	100.00	0.220	5.0	2.50	1.20
0810P-151M	150.00	0.340	4.0	2.00	0.90
0810P-221M	220.00	0.440	3.5	1.60	0.70
0810P-331M	330.00	0.700	2.5	1.20	0.60
0810P-471M	470.00	0.950	2.0	1.00	0.30
0810P-681M	680.00	1.200	2.0	1.00	0.20
0810P-102M	1000.00	2.00	1.50	0.80	0.10

* GDO0810P-1R0 = L Tol. by N = 30%
* Test @100KHz, 1Vrms
* Isat = L value 10% drop
* Irms = Tempereture 15° C Rise

Product Series Code	**GDO**	Brand	GOTREND
File Version	GDO-V3R0	Editor	Teddy
Established Date	2009.08.04	Description	Ferrite Core With Plastic Base Inductor
Latest Edit Date	2013.02.23		

Part No.	L (uH) +/-20%	DCR (Ohm) max.	SRF (MHz) typ.	Isat (A) typ.	Irms (A) typ.
1306P-1R0M	1.00	0.009	80.0	20.00	8.60
1306P-2R2N	2.20	0.014	80.0	16.00	7.10
1306P-3R3N	3.30	0.018	60.0	14.00	6.20
1306P-5R6M	5.60	0.020	40.0	12.00	5.30
1306P-100M	10.00	0.031	30.0	10.00	4.30
1306P-150M	15.00	0.036	22.0	8.00	4.00
1306P-220M	22.00	0.047	20.0	7.00	3.50
1306P-330M	33.00	0.066	15.0	5.50	3.00
1306P-470M	47.00	0.086	9.0	4.50	2.60
1306P-680M	68.00	0.130	8.0	3.50	2.30
1306P-101M	100.00	0.190	7.0	3.00	1.80
1306P-151M	150.00	0.250	6.0	2.60	1.50
1306P-221M	220.00	0.380	5.0	2.40	1.20
1306P-331M	330.00	0.560	4.0	1.90	1.00
1306P-471M	470.00	0.850	3.0	1.40	0.82
1306P-681M	680.00	1.100	2.5	1.20	0.72
1306P-102M	1000.00	1.800	2.0	1.00	0.56
1306P-152M	1500.00	2.660	/	0.80	0.46
1306P-222M	2200.00	4.300	/	0.60	0.36
1306P-332M	3300.00	6.600	/	0.30	0.29
1306P-472M	4700.00	9.700	/	0.09	0.24
1306P-682M	6800.00	11.500	/	0.07	0.22
1306P-722M	7200.00	12.200	/	0.06	0.21

* Test @100KHz, 1Vrms
* Isat = L value 10% drop
* Irms = Tempereture 15° C Rise

Product Series Code:	**GNR**	Brand:	GOTREND
File Version:	GNR-V4R6	Editor:	Teddy
Established Date:	2009.08.19	Description:	SMD Shielded Power Inductor
Latest Edit Date:	2013.02.23		

* Features & Application :

1.Power supply PWM circuit input / output inductor
2.Power line noise suppression
3.DC-DC Converter
4.To help you go pass CE/FCC standard
5.TFT/ WiFi/ MobilePhone/ MP3/ PDA....etc. Application
6.Low Profile for all compact design

* Product Identify :

Pin Foot	EMI	Color	Made In
SMD	shield	Black	China / Taiwan

RoHS Compliant – SGS Test Report

Pb	Cd	Hg	Cr+6	PBB	PBDE
<1000ppm	ND	ND	ND	ND	ND

* Part No. Example :

PN	GNR	3010	P	[ ]	-	6R8	M	[ ]
ID	1	2	3	4		5	6	7

1 GOTREND Series Code
2 Dimension Code : 3010 = (L) 3.1 x (W) 3.1 x (H) 1.0 mm
3 RoHS Compliance
4 [I] : For GNR3010 / 3015 Marking series Code
5 Inductance : 6R8 = 6.8uH Ex : 100 = 10uH , 101 = 100uH
6 Tolerance : M = 20% , N = 30%
7 [S] : For custom special design

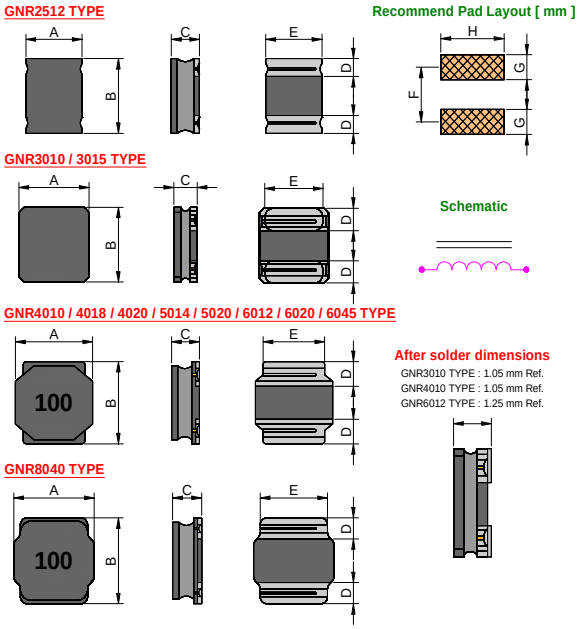
* Operating & Storage Condition :

1.Storage Condition -40 ~ +85 ° C / RH 65 ± 10%
2.Storage Life Time 6 Months @ 20 ° C / RH 65% (no seal off)
3.Operating Condition -40 ~ +105 ° C (Including self-temperature rise)

Attention & Caution:

* Keep out of splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condense
* Please be careful for the stress to this product by board flexure or something after the mounting.

* Dimensions : [mm]



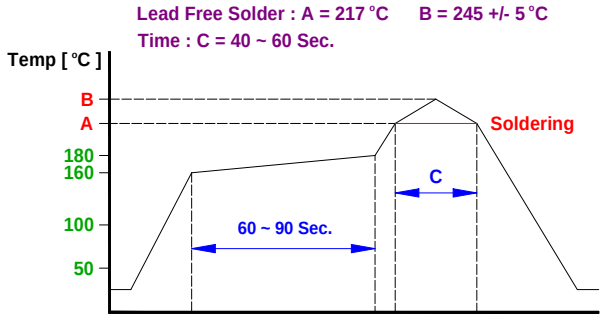
(Measured before solder)

Type	Size Code	A (Max.)	B (Max.)	C (Max.)	D (Ref.)	E (Ref.)	F (Ref.)	G (Ref.)	H (Ref.)
GNR	2510	2.10	2.60	1.00	0.85	2.00	1.65	0.85	2.00
GNR	2512	2.10	2.60	1.20	0.40	2.10	1.70	0.90	2.10
GNR	3010	3.10	3.10	1.00	0.90	2.70	2.20	1.00	2.70
GNR	3015	3.10	3.10	1.50	0.90	2.70	2.20	1.00	2.70
GNR	4010	4.20	4.20	1.00	1.10	3.50	2.80	1.20	3.70
GNR	4018	4.20	4.20	1.80	1.10	3.50	2.80	1.20	3.70
GNR	4020	4.20	4.20	2.00	1.10	3.50	2.80	1.20	3.70
GNR	5014	5.10	5.10	1.40	1.00	4.80	3.80	1.40	5.00
GNR	5020	5.10	5.10	2.00	1.00	4.80	3.80	1.40	5.00
GNR	6012	6.20	6.20	1.20	1.15	5.10	4.70	1.60	5.70
GNR	6020	6.20	6.20	2.00	1.15	5.10	4.70	1.60	5.70
GNR	6028	6.20	6.20	2.80	1.15	5.10	4.70	1.60	5.70
GNR	6045	6.20	6.20	4.50	1.15	5.10	4.70	1.60	5.70
GNR	8040	8.20	8.20	4.20	1.60	6.30	5.60	1.80	7.50

* Test Condition :

Equipment	1.L – WK3260 LCR Meter 2.RDC – Twintex TM8089A 3.IDC – WK3260+3265B DC-Bias 4.Dimension - Mitutoyo 5.Temperature – TECPEL 305A
Ambient	Temperature 20 ± 5 ° C Humidity RH 65 ± 20%
	If there may be any doubt on the test result, Measurement shall be made within the following limits:
Ambient	Temperature 25 ± 5 ° C Humidity RH 75 ± 10%

* Recommend IR Reflow Curve : GTX-IR-FILE001



Notice : Iron Soldering , Solder < 30 Watt , Direct touch the terminal x 3 Sec. Max. @ 350 °C

Product Series Code:	**GNR**	Brand:	GOTREND
File Version:	GNR-V4R6	Editor:	Teddy
Established Date:	2009.08.19	Description:	SMD Shielded Power Inductor
Latest Edit Date:	2013.02.23		

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GNR2510P-R47□	0.47	M,N	40	48	2500	2650
GNR2510P-R68□	0.68	M,N	52	64	2200	2200
GNR2510P-1R0□	1.00	M,N	70	85	1800	1900
GNR2510P-1R5□	1.50	M,N	107	128	1500	1500
GNR2510P-2R2□	2.20	M	150	185	1200	1200
GNR2510P-3R3□	3.30	M	225	270	1000	1000
GNR2510P-4R7□	4.70	M	330	398	880	820
GNR2510P-6R8□	6.80	M	443	532	740	710
GNR2510P-100□	10.00	M	712	854	590	550

- Inductance test Freq. : 1MHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GNR2512P-R47□	0.47	M,N	47	56	3700	2200
GNR2512P-1R0□	1.00	M,N	73	88	2700	1800
GNR2512P-1R5□	1.50	M,N	105	126	2200	1500
GNR2512P-2R2□	2.20	M	129	155	2000	1300
GNR2512P-3R3□	3.30	M	227	272	1600	1000
GNR2512P-4R7□	4.70	M	338	406	1300	810
GNR2512P-5R6□	5.60	M	375	450	1150	720
GNR2512P-6R8□	6.80	M	510	612	1100	660
GNR2512P-100□	10.00	M	630	756	900	590

- Inductance test Freq. : 1MHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GNR2512PL-R47□	0.47	M	34	41	3700	3000
GNR2512PL-1R0□	1.00	M	50	60	2600	2300
GNR2512PL-1R5□	1.50	M	72	87	2200	1950
GNR2512PL-2R2□	2.20	M	96	116	1850	1830
GNR2512PL-3R3□	3.30	M	140	168	1450	1450
GNR2512PL-4R7□	4.70	M	210	252	1200	1280

- Inductance test Freq. : 1MHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

Product Series Code:	**GNR**	Brand:	GOTREND
File Version:	GNR-V4R6	Editor:	Teddy
Established Date:	2009.08.19	Description:	SMD Shielded Power Inductor
Latest Edit Date:	2013.02.23		

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GNR3010P-1R0□	1.00	M,N	65	78	1950	1700
GNR3010P-1R2□	1.20	M,N	80	96	1900	1650
GNR3010P-1R5□	1.50	M,N	80	96	1600	1650
GNR3010P-1R8□	1.80	N	88	105	1520	1520
GNR3010P-2R2□	2.20	M	95	114	1450	1450
GNR3010P-3R3□	3.30	M	160	192	1050	1300
GNR3010P-4R7□	4.70	M	190	228	950	1100
GNR3010P-6R8□	6.80	M	300	360	760	850
GNR3010P-100□	10.00	M	450	540	610	720
GNR3010P-150□	15.00	M	740	888	480	560
GNR3010P-220□	22.00	M	980	1176	420	500
GNR3010P-330□	33.00	M	1550	1860	340	415
GNR3010P-470□	47.00	M	2000	2400	270	320

- Inductance test Freq. : 1MHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GNR3015P-1R0□	1.00	M,N	40	48	2350	2350
GNR3015P-1R5□	1.50	M,N	55	66	2000	2100
GNR3015P-1R8□	1.80	N	60	72	1830	1950
GNR3015P-2R2□	2.20	M	60	72	1650	1800
GNR3015P-3R3□	3.30	M	93	112	1400	1600
GNR3015P-4R7□	4.70	M	113	136	1200	1400
GNR3015P-5R6□	5.60	M	131	157	1100	1250
GNR3015P-6R8□	6.80	M	176	211	1050	1100
GNR3015P-100□	10.00	M	234	276	880	1000
GNR3015P-150□	15.00	M	352	422	680	800
GNR3015P-220□	22.00	M	510	622	580	600
GNR3015P-330□	33.00	M	799	959	460	500
GNR3015P-470□	47.00	M	1172	1406	380	400
GNR3015P-101□	100.00	M	2433	2920	270	290

- Inductance test Freq. : 1MHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

Product Series Code:	**GNR**	Brand:	GOTREND
File Version:	GNR-V4R6	Editor:	Teddy
Established Date:	2009.08.19	Description:	SMD Shielded Power Inductor
Latest Edit Date:	2013.02.23		

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GNR4010P-1R0□	1.00	N	100	120	1800	1050
GNR4010P-2R2□	2.20	N	150	180	1150	890
GNR4010P-3R3□	3.30	M	180	216	1100	820
GNR4010P-4R7□	4.70	M	210	252	900	750
GNR4010P-6R8□	6.80	M	300	360	740	620
GNR4010P-100□	10.00	M	380	456	560	600
GNR4010P-150□	15.00	M	510	612	470	510
GNR4010P-220□	22.00	M	870	1044	360	400
GNR4010P-330□	33.00	M	1540	1848	280	300
GNR4010P-470□	47.00	M	1810	2172	240	280

- Inductance test Freq. : 100KHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GNR4018P-R56□	0.56	N	22.0	30.0	4500	2200
GNR4018P-1R0□	1.00	N	31.5	42.0	3700	1850
GNR4018P-1R2□	1.20	N	31.5	42.0	3700	1850
GNR4018P-1R5□	1.50	N	40.0	48.0	3500	1700
GNR4018P-2R2□	2.20	M	60.0	72.0	2700	1440
GNR4018P-3R3□	3.30	M	72.0	86.0	2200	1230
GNR4018P-4R7□	4.70	M	80.0	96.0	1700	1200
GNR4018P-6R8□	6.80	M	110.0	132.0	1450	1060
GNR4018P-100□	10.00	M	180.0	216.0	1200	840
GNR4018P-150□	15.00	M	250.0	300.0	940	650
GNR4018P-220□	22.00	M	360.0	432.0	800	590
GNR4018P-330□	33.00	M	530.0	636.0	650	490
GNR4018P-470□	47.00	M	650.0	780.0	570	420
GNR4018P-680□	68.00	M	1000.0	1200.0	470	320
GNR4018P-101□	100.00	M	1500.0	1800.0	400	270
GNR4018P-151□	150.00	M	2500.0	3000.0	310	220
GNR4018P-221□	220.00	M	4000.0	4800.0	270	170

- Inductance test Freq. : 100KHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

Product Series Code:	**GNR**	Brand:	GOTREND
File Version:	GNR-V4R6	Editor:	Teddy
Established Date:	2009.08.19	Description:	SMD Shielded Power Inductor
Latest Edit Date:	2013.02.23		

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GNR4020P-1R0□	1.00	N	32.0	38.4	4100	2800
GNR4020P-2R2□	2.20	N	60.0	72.0	2800	2500
GNR4020P-3R3□	3.30	M,N	70.0	84.0	2200	2100
GNR4020P-4R7□	4.70	N	90.0	108.0	2000	1700
GNR4020P-6R8□	6.80	M	110.0	132.0	1600	1500
GNR4020P-100□	10.00	M	170.0	204.0	1400	1200
GNR4020P-150□	15.00	M	250.0	300.0	1000	1000
GNR4020P-220□	22.00	M	350.0	420.0	900	850
GNR4020P-330□	33.00	M	530.0	636.0	800	700
GNR4020P-470□	47.00	M	720.0	864.0	700	560
GNR4020P-680□	68.00	M	1000.0	1200.0	560	450
GNR4020P-101□	100.00	M	1500.0	1800.0	460	380
GNR4020P-151□	150.00	M	2500.0	3000.0	350	300
GNR4020P-221□	220.00	M	4000.0	4800.0	280	230

- Inductance test Freq. : 100KHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m 0hm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GNR5014P-1R2□	1.20	N	45.0	54.0	3800	2400
GNR5014P-2R2□	2.20	N	65.0	78.0	2800	2000
GNR5014P-3R3□	3.30	N	80.0	96.0	2350	1700
GNR5014P-4R7□	4.70	N	100.0	120.0	2050	1400
GNR5014P-6R8□	6.80	M	150.0	180.0	1600	1200
GNR5014P-100□	10.00	M	200.0	240.0	1400	1050

- Inductance test Freq. : 100KHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

Product Series Code:	**GNR**	Brand:	GOTREND
File Version:	GNR-V4R6	Editor:	Teddy
Established Date:	2009.08.19	Description:	SMD Shielded Power Inductor
Latest Edit Date:	2013.02.23		

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m 0hm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GNR5020P-1R0□	1.00	N	18.5	21.0	4400	3600
GNR5020P-1R5□	1.50	N	22.5	26.0	3500	3200
GNR5020P-2R0□	2.00	N	27.0	35.0	3200	2900
GNR5020P-2R2□	2.20	N	27.0	35.0	3000	2900
GNR5020P-3R3□	3.30	M	40.0	48.0	2600	2400
GNR5020P-4R7□	4.70	M	55.0	60.0	2000	2000
GNR5020P-6R8□	6.80	M	80.0	90.0	1600	1650
GNR5020P-100□	10.00	M	105.0	120.0	1300	1450
GNR5020P-150□	15.00	M	148.0	165.0	1100	1200
GNR5020P-220□	22.00	M	220.0	260.0	900	1000
GNR5020P-330□	33.00	M	340.0	380.0	800	760
GNR5020P-470□	47.00	M	590.0	760.0	600	580

- Inductance test Freq. : 100KHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m 0hm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GNR6012P-1R0□	1.00	N	50	65	2800	2300
GNR6012P-1R5□	1.50	N	65	85	2400	2000
GNR6012P-2R2□	2.20	N	75	100	2200	1800
GNR6012P-2R5□	2.50	N	90	108	2100	1730
GNR6012P-3R3□	3.30	M	100	120	2000	1640
GNR6012P-4R0□	4.00	N	105	126	1800	1570
GNR6012P-4R7□	4.70	N	110	145	1600	1450
GNR6012P-5R3□	5.30	M	115	150	1500	1400
GNR6012P-6R8□	6.80	M	165	198	1300	1180
GNR6012P-100□	10.00	M	235	282	1000	1000
GNR6012P-150□	15.00	M	330	396	800	790
GNR6012P-220□	22.00	M	530	636	760	630
GNR6012P-330□	33.00	M	700	840	590	530
GNR6012P-470□	47.00	M	1050	1260	520	460
GNR6012P-680□	68.00	M	1350	1620	440	410
GNR6012P-101□	100.00	M	2180	2616	350	320

- Inductance test Freq. : 100KHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

Product Series Code:	**GNR**	Brand:	GOTREND
File Version:	GNR-V4R6	Editor:	Teddy
Established Date:	2009.08.19	Description:	SMD Shielded Power Inductor
Latest Edit Date:	2013.02.23		

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m 0hm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GNR6020P-R80□	0.8	N	16.0	21.0	4500	5100
GNR6020P-1R0□	1.0	N	21.0	27.3	4200	4000
GNR6020P-1R5□	1.5	M / N	26.0	33.8	4000	3200
GNR6020P-2R2□	2.2	N	34.0	44.2	3200	2700
GNR6020P-3R3□	3.3	M	40.0	52.0	2800	2600
GNR6020P-4R7□	4.7	N	48.0	62.4	2400	2000
GNR6020P-100□	10.0	M	125.0	162.5	1700	1400
GNR6020P-220□	22.0	M	220.0	290.0	1050	900
GNR6020P-330□	33.0	M	260.0	450.0	900	800
GNR6020P-470□	47.0	M	430.0	560.0	850	650

- Inductance test Freq. : 100KHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m 0hm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GNR6028P-R90□	0.90	N	13.0	16.9	6600	4600
GNR6028P-1R5□	1.50	N	16.0	20.8	5000	4200
GNR6028P-2R2□	2.20	N	20.0	26.0	4200	3700
GNR6028P-3R0□	3.00	N	23.0	29.9	3600	3400
GNR6028P-4R7□	4.70	M	31.0	40.3	2700	3000
GNR6028P-6R0□	6.00	M	40.0	52.0	2500	2500
GNR6028P-100□	10.00	M	65.0	84.5	1900	1900
GNR6028P-150□	15.00	M	95.0	123.5	1600	1800
GNR6028P-220□	22.00	M	135.0	175.5	1300	1400
GNR6028P-330□	33.00	M	220.0	286.0	1100	1100
GNR6028P-470□	47.00	M	300.0	390.0	950	920
GNR6028P-680□	68.00	M	420.0	546.0	760	770
GNR6028P-101□	100.00	M	600.0	780.0	620	660

- Inductance test Freq. : 100KHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

Product Series Code:	**GNR**	Brand:	GOTREND
File Version:	GNR-V4R6	Editor:	Teddy
Established Date:	2009.08.19	Description:	SMD Shielded Power Inductor
Latest Edit Date:	2013.02.23		

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m 0hm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GNR6045P-1R0□	1.00	N	14.0	18.2	8500	4200
GNR6045P-1R3□	1.30	N	16.0	20.8	8000	4000
GNR6045P-1R8□	1.80	N	18.0	23.4	7000	3700
GNR6045P-2R2□	2.20	M,N	21.0	27.3	6000	3500
GNR6045P-2R3□	2.30	N	21.0	27.3	6000	3500
GNR6045P-3R0□	3.00	N	24.0	31.2	5000	3200
GNR6045P-3R3□	3.30	N	24.0	31.2	4500	3200
GNR6045P-4R5□	4.50	M	31.0	40.3	4000	3000
GNR6045P-4R7□	4.70	M	31.0	40.3	4000	3000
GNR6045P-6R3□	6.30	M	38.0	49.4	3800	2800
GNR6045P-100□	10.00	M	47.0	61.1	3000	2500
GNR6045P-150□	15.00	M	77.0	100.1	2300	1900
GNR6045P-220□	22.00	M	115.0	149.5	1900	1500
GNR6045P-330□	33.00	M	145.0	188.5	1500	1400
GNR6045P-470□	47.00	M	220.0	286.0	1300	1100
GNR6045P-680□	68.00	M	330.0	429.0	1000	900
GNR6045P-101□	100.00	M	500.0	650.0	800	700

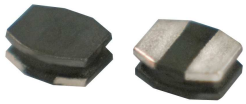
- Inductance test Freq. : 100KHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

Product Series Code:	**GNR**	Brand:	GOTREND
File Version:	GNR-V4R6	Editor:	Teddy
Established Date:	2009.08.19	Description:	SMD Shielded Power Inductor
Latest Edit Date:	2013.02.23		

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m 0hm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GNR8040P-R90□	0.90	N	6.0	8.0	11000	7800
GNR8040P-1R4□	1.40	N	7.0	10.0	9000	7000
GNR8040P-1R8□	1.80	M	9.0	11.7	8000	6500
GNR8040P-2R0□	2.00	N	9.0	12.0	7400	6300
GNR8040P-2R5□	2.50	N	12.0	16.0	6400	5400
GNR8040P-3R6□	3.60	N	15.0	20.0	5300	4900
GNR8040P-4R7□	4.70	N	18.0	24.0	4700	4100
GNR8040P-6R8□	6.80	N	25.0	33.0	4000	3700
GNR8040P-100□	10.00	M	34.0	45.0	3400	3100
GNR8040P-150□	15.00	M	50.0	65.0	2700	2400
GNR8040P-220□	22.00	M	66.0	86.0	2200	2200
GNR8040P-330□	33.00	M	100.0	130.0	1900	1700
GNR8040P-470□	47.00	M	150.0	195.0	1500	1400
GNR8040P-680□	68.00	M	230.0	299.0	1200	1100
GNR8040P-101□	100.00	M	290.0	377.0	1000	1000
GNR8040P-151□	150.00	M	450.0	540.0	800	800

- Inductance test Freq. : 100KHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)



Product Series Code :	**GNRT**	Brand :	GOTREND
File Version :	GNRT-V1R3	Editor :	Teddy
Established Date :	2012.02.17	Description :	SMD Shielded Power Inductor
Latest Edit Date :	2013.03.15		

* Features & Application :

1.Power supply PWM circuit input / output inductor
2.Power line noise suppression
3.DC-DC Converter
4.To help you go pass CE/FCC standard
5.TFT/ WiFi/ MobilePhone/ MP3/ PDA....etc. Application
6.Low Profile for all compact design

* Product Identify :

Pin Foot	EMI	Color	Made In
SMD	shield	Black	China / Taiwan

RoHS Compliant – SGS Test Report

Pb	Cd	Hg	Cr+6	PBB	PBDE
<1000ppm	ND	ND	ND	ND	ND

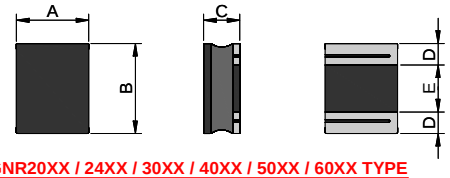
* Part No. Example :

PN	GNRT	2012	P	[ ]	-	1R0	[ ]
ID	1	2	3	4		5	6

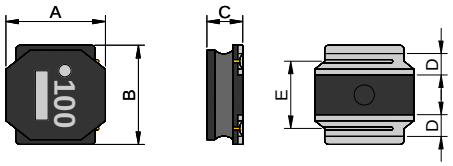
1 GOTREND Series Code
2 Dimension Code : 2012 = (L) 2.0 x (W) 2.0 x (H) 1.2 mm
3 RoHS Compliance
4 [A] [B] : Special Material Code
5 Inductance : 1R0 = 1.0uH Ex : 100 = 10uH
6 Tolerance : M = 20% , N = 30%

* Dimensions : [mm]

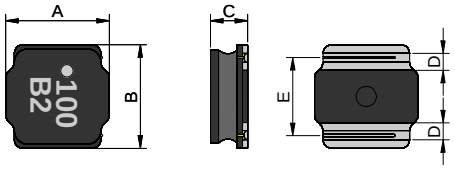
GNR252010 / 252012 TYPE



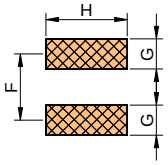
GNR20XX / 24XX / 30XX / 40XX / 50XX / 60XX TYPE



GNR8030 / 8040 TYPE



Recommend Pad Layout [mm]



Schematic

* Operating & Storage Condition :

1.Storage Condition	-40 ~ +105 ° C / RH 65 ± 10%
2.Storage Life Time	6 Months @ 20 ° C / RH 65% (no seal off)
3.Operating Condition	-40 ~ +105 ° C (Including self-temperature rise)

Attention & Caution:

* Keep out of splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condense
* Please be careful for the stress to this product by board flexure or something after the mounting.

* Product Marking :

NO MARKING

2012PB / 252010P / 252012P / 3015P

COLOR CODING

2410PA / 2412PA / 3010PA / 3012PA

PRODUCT NAME MARK & POLARITY

5010PB / 5012PB / 5020PB / 5040PB
6010PB / 6012PB / 6020PB / 6028PB / 6045PB

INDUCTANCE SYMBOL

4010PB / 4012PB / 4018PB

PRODUCT NAME MARK & DATE CODE

8030PB / 8040PB

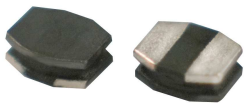
Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
2012PB	2.00+/-0.1	2.00+/-0.1	1.20	0.50	1.25	1.35	0.65	2.00
2410PA	2.40+/-0.1	2.40+/-0.1	1.00	0.60	1.45	1.45	0.70	2.00
2412PA	2.40+/-0.1	2.40+/-0.1	1.20	0.60	1.45	1.45	0.70	2.00
252010P	2.50+/-0.2	2.00+/-0.2	1.00	0.85 Ref.	0.80 Ref.	1.75	0.95	2.20
252012P	2.50+/-0.2	2.00+/-0.2	1.20	0.85 Ref.	0.80 Ref.	1.75	0.95	2.20
3010PA	3.00+/-0.1	3.00+/-0.1	1.00	0.90	1.90	2.20	0.80	2.70
3012PA	3.00+/-0.1	3.00+/-0.1	1.20	0.90	1.90	2.20	0.80	2.70
3015P	3.00+/-0.1	3.00+/-0.1	1.50	0.90	1.90	2.20	0.80	2.70
4010PB	4.00+/-0.2	4.00+/-0.2	1.00	1.10	2.50	2.80	1.20	3.70
4012PB	4.00+/-0.2	4.00+/-0.2	1.20	1.10	2.50	2.80	1.20	3.70
4018PB	4.00+/-0.2	4.00+/-0.2	1.80	1.10	2.50	2.80	1.20	3.70
5010PB	4.90+/-0.2	4.90+/-0.2	1.00	1.20	3.30	3.60	1.50	4.00
5012PB	4.90+/-0.2	4.90+/-0.2	1.20	1.20	3.30	3.60	1.50	4.00
5020PB	4.90+/-0.2	4.90+/-0.2	2.00	1.20	3.30	3.60	1.50	4.00
5040PB	4.90+/-0.2	4.90+/-0.2	4.00	1.20	3.30	3.60	1.50	4.00
6010PB	6.00+/-0.2	6.00+/-0.2	1.00	1.35	4.00	4.70	1.60	5.70
6012PB	6.00+/-0.2	6.00+/-0.2	1.20	1.35	4.00	4.70	1.60	5.70
6020PB	6.00+/-0.2	6.00+/-0.2	2.00	1.35	4.00	4.70	1.60	5.70
6028PB	6.00+/-0.2	6.00+/-0.2	2.80	1.35	4.00	4.70	1.60	5.70
6045PB	6.00+/-0.2	6.00+/-0.2	4.50	1.35	4.00	4.70	1.60	5.70
8030PB	8.00+/-0.2	8.00+/-0.2	3.00	1.60	5.60	5.60	1.80	7.50
8040PB	8.00+/-0.2	8.00+/-0.2	4.00	1.60	5.60	5.60	1.80	7.50

Mark of year and month :

Year / month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Odd number (2013.2015..)	A	B	C	D	E	F	G	H	J	K	L	M
Even number (2012.2014..)	N	P	Q	R	S	T	U	V	W	X	Y	Z

Mark of week :

1st ~ 8th	1
9th ~ 15th	2
16th ~ 23th	3
24th ~ 31th	4



Product Series Code :	**GNRT**	Brand :	GOTREND
File Version :	GNRT-V1R3	Editor :	Teddy
Established Date :	2012.02.17	Description :	SMD Shielded Power Inductor
Latest Edit Date :	2013.03.15		

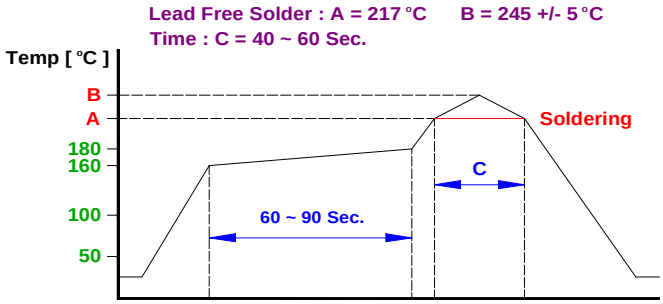
* Test Condition :

Equipment	1.L – WK3260 LCR Meter 2.RDC – Twintex TM8089A 3.IDC – WK3260+3265B DC-Bias 4.Dimension - Mitutoyo 5.Temperature – TECPEL 305A
Ambient	Temperature 20 ± 5 ° C Humidity RH 65 ± 20%

If there may be any doubt on the test result, Measurement shall be made within the following limits:

Ambient	Temperature 25 ± 5 ° C Humidity RH 75 ± 10%

* Recommend IR Reflow Curve : GTX-IR-FILE001

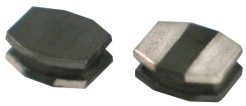


Notice : Iron Soldering , Solder < 30 Watt , Direct touch the terminal x 3 Sec. Max. @ 350°C

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT2012PB-1R0☐	1.00	N	70.0	84.0	1900	1700
GNRT2012PB-1R5☐	1.50	N	90.0	108.0	1650	1500
GNRT2012PB-2R2☐	2.20	M	107.0	128.4	1350	1370
GNRT2012PB-3R3☐	3.30	M	190.0	228.0	1000	1020
GNRT2012PB-4R7☐	4.70	M	241.0	289.2	900	910

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)



Product Series Code :	**GNRT**	Brand :	GOTREND
File Version :	GNRT-V1R3	Editor :	Teddy
Established Date :	2012.02.17	Description :	SMD Shielded Power Inductor
Latest Edit Date :	2013.03.15		

* Electrical Characteristics :

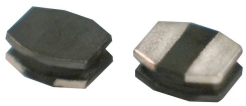
GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT2410PA-R68□	0.68	N	60.0	72.0	2200	1570
GNRT2410PA-1R0□	1.00	N	70.0	84.0	1800	1410
GNRT2410PA-1R5□	1.50	M	110.0	132.0	1550	1160
GNRT2410PA-2R2□	2.20	M	150.0	180.0	1290	970
GNRT2410PA-3R3□	3.30	M	220.0	264.0	1000	770
GNRT2410PA-4R7□	4.70	M	290.0	348.0	880	670
GNRT2410PA-6R8□	6.80	M	410.0	492.0	750	570
GNRT2410PA-100□	10.00	M	690.0	828.0	550	450
GNRT2410PA-150□	15.00	M	1020.0	1224.0	470	370
GNRT2410PA-220□	22.00	M	1470.0	1764.0	390	300

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT2412PA-1R0□	1.00	N	77.0	92.4	2350	1300
GNRT2412PA-1R5□	1.50	N	100.0	120.0	2100	1150
GNRT2412PA-2R2□	2.20	M	140.0	168.0	1700	1000
GNRT2412PA-3R3□	3.30	M	225.0	270.0	1400	750
GNRT2412PA-4R7□	4.70	M	300.0	360.0	1150	650
GNRT2412PA-6R8□	6.80	M	420.0	504.0	950	550
GNRT2412PA-100□	10.00	M	600.0	720.0	810	450

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)



Product Series Code :	**GNRT**	Brand :	GOTREND
File Version :	GNRT-V1R3	Editor :	Teddy
Established Date :	2012.02.17	Description :	SMD Shielded Power Inductor
Latest Edit Date :	2013.03.15		

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT252010P-R47□	0.47	N	38	46	2500	2650
GNRT252010P-R68□	0.68	N	52	62	2050	2200
GNRT252010P-1R0□	1.00	N	70	84	1750	1900
GNRT252010P-1R5□	1.50	N	107	128	1450	1500
GNRT252010P-2R2□	2.20	M	158	190	1200	1200
GNRT252010P-3R3□	3.30	M	229	275	940	1000
GNRT252010P-4R7□	4.70	M	332	398	800	820
GNRT252010P-6R8□	6.80	M	443	532	680	710
GNRT252010P-100□	10.00	M	712	854	560	550

- Inductance test Freq. : 1MHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT252012P-R47□	0.47	N	47	57	2750	2150
GNRT252012P-1R0□	1.00	N	73	88	2200	1700
GNRT252012P-1R5□	1.50	N	105	126	1800	1450
GNRT252012P-2R2□	2.20	M	129	155	1550	1300
GNRT252012P-3R3□	3.30	M	227	273	1250	980
GNRT252012P-4R7□	4.70	M	338	406	1050	810
GNRT252012P-6R8□	6.80	M	510	612	850	650
GNRT252012P-100□	10.00	M	630	756	730	590

- Inductance test Freq. : 1MHz / 0.1V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

Product Series Code :	**GNRT**	Brand :	GOTREND
File Version :	GNRT-V1R3	Editor :	Teddy
Established Date :	2012.02.17	Description :	SMD Shielded Power Inductor
Latest Edit Date :	2013.03.15		

* Electrical Characteristics :

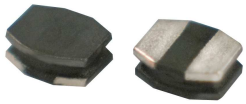
GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT3010PA-1R0□	1.00	N	65.0	78.0	1700	1480
GNRT3010PA-1R5□	1.50	N	75.0	90.0	1440	1370
GNRT3010PA-2R2□	2.20	M	83.0	99.6	1300	1300
GNRT3010PA-3R3□	3.30	M	130.0	156.0	1000	1030
GNRT3010PA-4R7□	4.70	M	170.0	204.0	850	900
GNRT3010PA-6R8□	6.80	M	250.0	300.0	700	745
GNRT3010PA-100□	10.00	M	350.0	420.0	600	620
GNRT3010PA-150□	15.00	M	550.0	660.0	450	480
GNRT3010PA-220□	22.00	M	770.0	924.0	380	410

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT3012PA-1R0□	1.00	N	48.0	57.6	2200	1710
GNRT3012PA-1R5□	1.50	N	55.0	66.0	1700	1600
GNRT3012PA-2R2□	2.20	M	75.0	90.0	1500	1370
GNRT3012PA-3R3□	3.30	M	100.0	120.0	1200	1210
GNRT3012PA-4R7□	4.70	M	130.0	156.0	1000	1060
GNRT3012PA-6R8□	6.80	M	190.0	228.0	850	890
GNRT3012PA-100□	10.00	M	270.0	324.0	730	720
GNRT3012PA-150□	15.00	M	450.0	540.0	530	570
GNRT3012PA-220□	22.00	M	630.0	756.0	500	500

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)



Product Series Code :	**GNRT**	Brand :	GOTREND
File Version :	GNRT-V1R3	Editor :	Teddy
Established Date :	2012.02.17	Description :	SMD Shielded Power Inductor
Latest Edit Date :	2013.03.15		

* Electrical Characteristics :

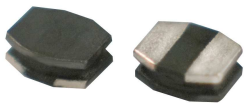
GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT3015P-1R0□	1.00	N	30.0	36.0	2100	2100
GNRT3015P-1R5□	1.50	N	40.0	48.0	1800	1820
GNRT3015P-2R2□	2.20	M	60.0	72.0	1480	1500
GNRT3015P-3R3□	3.30	M	80.0	96.0	1210	1230
GNRT3015P-4R7□	4.70	M	120.0	144.0	1020	1040
GNRT3015P-6R8□	6.80	M	160.0	192.0	870	880
GNRT3015P-100□	10.00	M	230.0	276.0	700	710
GNRT3015P-150□	15.00	M	360.0	432.0	560	560
GNRT3015P-220□	22.00	M	520.0	624.0	470	470
GNRT3015P-330□	33.00	M	840.0	1008.0	390	370
GNRT3015P-470□	47.00	M	1340.0	1608.0	320	300

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.	Inductance Symbol
GNRT4010PB-1R0□	1.00	N	56.0	67.2	2000	1900	A
GNRT4010PB-2R2□	2.20	M	85.0	102.0	1200	1500	C
GNRT4010PB-3R3□	3.30	M	100.0	120.0	1100	1400	E
GNRT4010PB-4R7□	4.70	M	140.0	168.0	950	1200	H
GNRT4010PB-6R8□	6.80	M	200.0	240.0	800	1000	I
GNRT4010PB-100□	10.00	M	300.0	360.0	620	750	K
GNRT4010PB-150□	15.00	M	430.0	516.0	540	600	M
GNRT4010PB-220□	22.00	M	570.0	684.0	450	500	N

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)



Product Series Code :	**GNRT**	Brand :	GOTREND
File Version :	GNRT-V1R3	Editor :	Teddy
Established Date :	2012.02.17	Description :	SMD Shielded Power Inductor
Latest Edit Date :	2013.03.15		

* Electrical Characteristics :

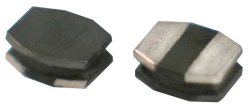
GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.	Inductance Symbol
GNRT4012PB-1R0□	1.00	N	42.0	50.4	2800	2200	A
GNRT4012PB-2R2□	2.20	M	60.0	72.0	1650	1900	C
GNRT4012PB-3R3□	3.30	M	70.0	84.0	1400	1700	E
GNRT4012PB-4R7□	4.70	M	95.0	114.0	1200	1500	H
GNRT4012PB-6R8□	6.80	M	125.0	150.0	900	1300	I
GNRT4012PB-100□	10.00	M	170.0	204.0	800	1100	K
GNRT4012PB-150□	15.00	M	260.0	312.0	650	750	M
GNRT4012PB-220□	22.00	M	400.0	480.0	500	620	N

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.	Inductance Symbol
GNRT4018PB-1R0□	1.00	N	27.0	32.4	4000	3200	A
GNRT4018PB-2R2□	2.20	M	42.0	50.4	3000	2200	C
GNRT4018PB-3R3□	3.30	M	55.0	66.0	2300	2000	E
GNRT4018PB-4R7□	4.70	M	70.0	84.0	2000	1700	H
GNRT4018PB-6R8□	6.80	M	98.0	117.6	1600	1450	I
GNRT4018PB-100□	10.00	M	150.0	180.0	1300	1200	K
GNRT4018PB-150□	15.00	M	210.0	252.0	1100	850	M
GNRT4018PB-220□	22.00	M	290.0	348.0	900	720	N
GNRT4018PB-330□	33.00	M	460.0	552.0	700	550	P

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)



Product Series Code :	**GNRT**	Brand :	GOTREND
File Version :	GNRT-V1R3	Editor :	Teddy
Established Date :	2012.02.17	Description :	SMD Shielded Power Inductor
Latest Edit Date :	2013.03.15		

* Electrical Characteristics :

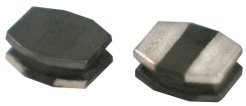
GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT5010PB-1R0□	1.00	N	70.0	84.0	2350	1750
GNRT5010PB-2R2□	2.20	N	105.0	126.0	1500	1400
GNRT5010PB-3R3□	3.30	M	125.0	150.0	1400	1250
GNRT5010PB-4R7□	4.70	M	145.0	174.0	1200	1150
GNRT5010PB-6R8□	6.80	M	185.0	277.5	1000	1000
GNRT5010PB-100□	10.00	M	250.0	300.0	850	900
GNRT5010PB-150□	15.00	M	400.0	480.0	680	650
GNRT5010PB-220□	22.00	M	600.0	720.0	550	450

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT5012PB-1R0□	1.00	N	53.0	63.6	4500	2300
GNRT5012PB-1R5□	1.50	N	70.0	84.0	3800	2200
GNRT5012PB-2R2□	2.20	M	85.0	102.0	3100	2000
GNRT5012PB-3R3□	3.30	M	160.0	192.0	2400	1450
GNRT5012PB-4R7□	4.70	M	180.0	216.0	2200	1400
GNRT5012PB-6R8□	6.80	M	260.0	312.0	1700	1100
GNRT5012PB-100□	10.00	M	420.0	504.0	1400	850
GNRT5012PB-150□	15.00	M	670.0	804.0	1200	640

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)



Product Series Code :	**GNRT**	Brand :	GOTREND
File Version :	GNRT-V1R3	Editor :	Teddy
Established Date :	2012.02.17	Description :	SMD Shielded Power Inductor
Latest Edit Date :	2013.03.15		

* Electrical Characteristics :

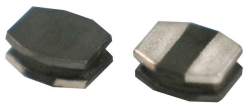
GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT5020PB-1R0□	1.00	N	21.0	25.2	4000	3600
GNRT5020PB-1R5□	1.50	N	26.0	31.2	3350	3200
GNRT5020PB-2R2□	2.20	N	35.0	42.0	2900	2900
GNRT5020PB-3R3□	3.30	N	48.0	57.6	2400	2400
GNRT5020PB-4R7□	4.70	M	60.0	72.0	2000	2000
GNRT5020PB-6R8□	6.80	M	90.0	108.0	1600	1650
GNRT5020PB-100□	10.00	M	120.0	144.0	1300	1450
GNRT5020PB-150□	15.00	M	165.0	198.0	1100	1200
GNRT5020PB-220□	22.00	M	260.0	312.0	900	1000

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT5040PB-1R5□	1.50	N	17.0	20.4	6400	4500
GNRT5040PB-2R2□	2.20	N	22.0	26.4	5000	3700
GNRT5040PB-3R3□	3.30	N	27.0	32.4	4000	3300
GNRT5040PB-4R7□	4.70	N	29.0	34.8	3300	3100
GNRT5040PB-6R8□	6.80	M	49.0	58.8	2800	2400
GNRT5040PB-100□	10.00	M	56.0	67.2	2300	2100
GNRT5040PB-150□	15.00	M	80.0	96.0	2000	1800
GNRT5040PB-220□	22.00	M	126.0	151.2	1500	1400
GNRT5040PB-330□	33.00	M	180.0	216.0	1300	1200
GNRT5040PB-470□	47.00	M	310.0	372.0	1100	900

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)



Product Series Code :	**GNRT**	Brand :	GOTREND
File Version :	GNRT-V1R3	Editor :	Teddy
Established Date :	2012.02.17	Description :	SMD Shielded Power Inductor
Latest Edit Date :	2013.03.15		

* Electrical Characteristics :

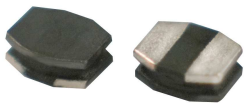
GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT6010PB-1R5□	1.50	M	90.0	108.0	2400	1900
GNRT6010PB-2R2□	2.20	M	110.0	132.0	1900	1700
GNRT6010PB-3R3□	3.30	M	135.0	162.0	1600	1500
GNRT6010PB-4R7□	4.70	M	165.0	198.0	1300	1400
GNRT6010PB-6R8□	6.80	M	220.0	264.0	1200	1200
GNRT6010PB-100□	10.00	M	270.0	324.0	1000	1100
GNRT6010PB-220□	22.00	M	580.0	696.0	650	700

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT6012PB-2R5□	2.50	N	90.0	108.0	2100	1800
GNRT6012PB-3R3□	3.30	N	105.0	126.0	1800	1700
GNRT6012PB-4R7□	4.70	M	125.0	150.0	1600	1550
GNRT6012PB-5R3□	5.30	M	145.0	174.0	1500	1450
GNRT6012PB-6R8□	6.80	M	165.0	198.0	1300	1350
GNRT6012PB-100□	10.00	M	200.0	240.0	1000	1200
GNRT6012PB-150□	15.00	M	295.0	354.0	800	800
GNRT6012PB-220□	22.00	M	465.0	558.0	760	650
GNRT6012PB-330□	33.00	M	580.0	696.0	590	550
GNRT6012PB-470□	47.00	M	965.0	1158.0	520	460
GNRT6012PB-680□	68.00	M	1160.0	1392.0	440	410
GNRT6012PB-101□	100.00	M	1670.0	2004.0	350	320

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)



Product Series Code :	**GNRT**	Brand :	GOTREND
File Version :	GNRT-V1R3	Editor :	Teddy
Established Date :	2012.02.17	Description :	SMD Shielded Power Inductor
Latest Edit Date :	2013.03.15		

* Electrical Characteristics :

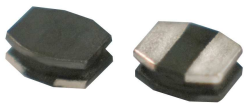
GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT6020PB-R80□	0.80	N	20.0	24.0	6400	4100
GNRT6020PB-1R5□	1.50	N	26.0	31.2	4300	3600
GNRT6020PB-2R2□	2.20	N	34.0	40.8	3200	2900
GNRT6020PB-3R3□	3.30	N	40.0	48.0	2800	2750
GNRT6020PB-4R7□	4.70	N	58.0	69.6	2400	2150
GNRT6020PB-6R8□	6.80	N	85.0	102.0	2000	1800
GNRT6020PB-100□	10.00	M	125.0	150.0	1900	1500
GNRT6020PB-220□	22.00	M	290.0	348.0	1250	950

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT6028PB-R90□	0.90	N	13.0	15.6	6700	4600
GNRT6028PB-1R5□	1.50	N	16.0	19.2	5100	4200
GNRT6028PB-2R2□	2.20	N	20.0	24.0	4200	3700
GNRT6028PB-3R0□	3.00	N	23.0	27.6	3600	3400
GNRT6028PB-4R7□	4.70	M	31.0	37.2	2700	3000
GNRT6028PB-6R0□	6.00	M	40.0	48.0	2500	2500
GNRT6028PB-100□	10.00	M	65.0	78.0	1900	1900
GNRT6028PB-150□	15.00	M	95.0	114.0	1600	1800
GNRT6028PB-220□	22.00	M	135.0	162.0	1300	1400
GNRT6028PB-330□	33.00	M	220.0	264.0	1100	1100
GNRT6028PB-470□	47.00	M	300.0	360.0	1000	920
GNRT6028PB-680□	68.00	M	420.0	504.0	800	770
GNRT6028PB-101□	100.00	M	600.0	720.0	650	660

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)



Product Series Code :	**GNRT**	Brand :	GOTREND
File Version :	GNRT-V1R3	Editor :	Teddy
Established Date :	2012.02.17	Description :	SMD Shielded Power Inductor
Latest Edit Date :	2013.03.15		

* Electrical Characteristics :

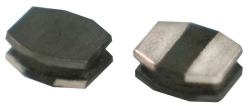
GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT6045PB-1R0□	1.00	N	14.0	16.8	9800	4500
GNRT6045PB-1R3□	1.30	N	16.0	19.2	8200	4200
GNRT6045PB-1R8□	1.80	N	19.0	22.8	7200	3900
GNRT6045PB-2R3□	2.30	N	22.0	26.4	6400	3600
GNRT6045PB-3R0□	3.00	N	24.0	28.8	5600	3300
GNRT6045PB-4R5□	4.50	M	30.0	36.0	4400	3100
GNRT6045PB-6R3□	6.30	M	36.0	43.2	3600	3000
GNRT6045PB-100□	10.00	M	46.0	55.2	3100	2400
GNRT6045PB-150□	15.00	M	70.0	84.0	2500	1900
GNRT6045PB-220□	22.00	M	107.0	128.4	2000	1600
GNRT6045PB-330□	33.00	M	141.0	169.2	1650	1400
GNRT6045PB-470□	47.00	M	211.0	253.2	1400	1150
GNRT6045PB-680□	68.00	M	304.0	364.8	1100	950
GNRT6045PB-101□	100.00	M	466.0	559.2	900	750

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT8030PB-1R0□	1.00	N	9.0	10.8	7800	6200
GNRT8030PB-1R5□	1.50	N	12.0	14.4	6200	5300
GNRT8030PB-2R2□	2.20	N	15.0	18.0	4900	4800
GNRT8030PB-3R3□	3.30	M	19.0	22.8	4200	4300
GNRT8030PB-4R7□	4.70	M	22.0	26.4	3600	4000
GNRT8030PB-6R8□	6.80	M	29.0	34.8	3000	3400
GNRT8030PB-100□	10.00	M	33.0	39.6	2400	3000
GNRT8030PB-150□	15.00	M	60.0	72.0	2000	2200
GNRT8030PB-220□	22.00	M	70.0	84.0	1750	1900
GNRT8030PB-330□	33.00	M	120.0	144.0	1300	1500
GNRT8030PB-470□	47.00	M	170.0	204.0	1100	1300

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)



Product Series Code :	**GNRT**	Brand :	GOTREND
File Version :	GNRT-V1R3	Editor :	Teddy
Established Date :	2012.02.17	Description :	SMD Shielded Power Inductor
Latest Edit Date :	2013.03.15		

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT8040PB-R90□	0.90	N	6.0	7.2	13000	7800
GNRT8040PB-1R4□	1.40	N	7.0	8.4	10000	7000
GNRT8040PB-2R0□	2.00	N	9.0	10.8	8100	6300
GNRT8040PB-3R6□	3.60	N	15.0	18.0	6400	4900
GNRT8040PB-4R7□	4.70	N	18.0	21.6	5400	4100
GNRT8040PB-6R8□	6.80	N	25.0	30.0	4400	3700
GNRT8040PB-100□	10.00	M	34.0	40.8	3800	3100
GNRT8040PB-150□	15.00	M	50.0	60.0	2900	2400
GNRT8040PB-220□	22.00	M	66.0	79.2	2400	2200

- Inductance test Freq. : 100KHz / 1.0V
- L-Tolerance : N = 30% , M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

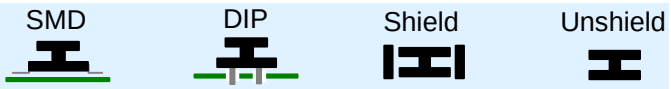
Product Series Code	**GTSD**	Brand	GOTREND
File Version	GTSD-V3R6	Editor	Teddy
Established Date	2009.09.01	Description	Ferrite Core Shielding SMD Choke
Latest Edit Date	2013.02.23		

Features & Application :

* Shielding Choke good in EMI and fit for various application
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* Mobile Device / Handheld Device / LowProfile Device / Panel...

Product Structure :

SMD ▼ DIP ▼ Shield Unshield



2005 RoHS Compliant - SGS Certified Result

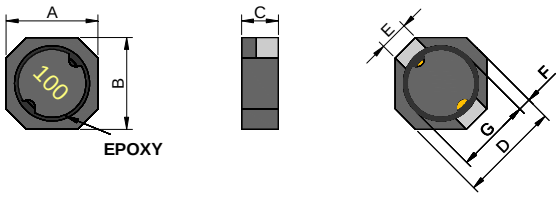
鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example :

GTSD	32	P	-	222	□
1	2	3		4	5

1. GOTREND Series : GTSD
2. Size Code : 32 = 3 x 3 x 2 about
3. P = Pb (Lead) Free < 1000 ppm
4. [L] Value : Inductance
5. Tolerance : M = +/-20% , N = +/-30%

DIMENSION : [mm] (measured before solder)



TYPE	A+/-0.3	B+/-0.3	C [max.]	D+/-0.3	E [ref.]	F [ref.]	G [ref.]
GTSD31	3.85	3.85	1.25	3.80	1.60	0.50	3.20
GTSD32	3.85	3.85	1.80	4.10	1.60	0.50	3.20
GTSD33	3.85	3.85	3.00	3.90	1.60	0.50	3.20
GTSD52	5.00	5.00	2.00	5.50	1.60	0.50	4.20
GTSD53	5.00	5.00	3.00	5.50	1.60	0.50	4.20

Test Equipment :

* HP4284A , HP42841A - L , IDC , Q , RDC
* HP8753D NETWORK ANALYZER - SRF

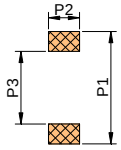
Standard Atmospheric Conditions :
Ambient Temp : 20 +/- 15°C
Relative Humidity : 65 +/- 20%
If there may be any doubt on the result,
measurement shall be made within the following limits :
Ambient Temp : 25 +/- 5°C
Relative Humidity : 75 +/- 10%

DIMENSION : [mm]

(Reference for after solder)

TYPE	A[ref.]	B[ref.]	C[ref.]
GTSD31	3.85	3.85	1.30
GTSD32	3.85	3.85	2.00
GTSD33	3.85	3.85	3.00
GTSD52	5.00	5.00	2.00
GTSD53	5.00	5.00	3.00

Recommend Pad Layout :



TYPE	P1[ref.]	P2[ref.]	P3[ref.]
GTSD31 / 32 / 33	4.90	1.70	2.50
GTSD52 / 53	6.50	1.80	4.20

Operating & Storage Condition :

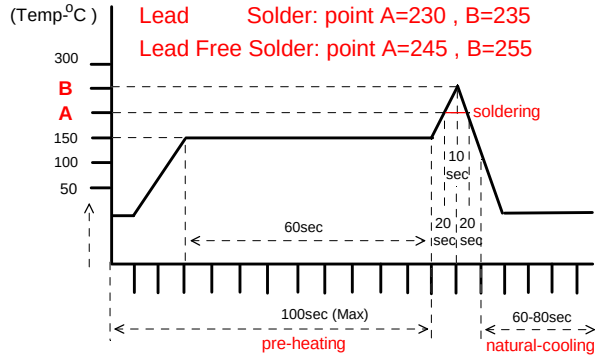
OPERATING TEMP : -40 ~ +105°C

STORAGE TEMP : -40 ~ +105°C
STORAGE LIFE TIME : 12 MONTH @25°C , RH 65%

Attention & Caution :

Please avoid following matters :
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260° C

Product Series Code	**GTSD**	Brand	GOTREND
File Version	GTSD-V3R6	Editor	Teddy
Established Date	2009.09.01	Description	Ferrite Core Shielding SMD Choke
Latest Edit Date	2013.02.23		

L CODE	L(uH) ± 20% (0.25V)	Test Frequency	DCR (mΩ) (Max)						IDC (Amp) (max)					
			GTSD 31	GTSD 32	GTSD 33	GTSD 33C	GTSD 52	GTSD 53	GTSD 31	GTSD 32	GTSD 33	GTSD 33C	GTSD 52	GTSD 53
R47o	0.47	100KHz		17			15			1.84			2.33	
1R0o	1.00		60	30	9		24	15	1.60	1.80	1.90		2.27	4.00
1R1o	1.10							20						3.87
1R2o	1.20		65	83	10		44	22	1.40	1.70	1.75		2.15	3.80
1R5o	1.50		77	52	13	15		22	1.24	1.60	1.45	1.90		3.80
1R8o	1.80		93	56		18			1.22	1.55		1.76		
2R0o	2.00				16		46	27			1.25		1.90	2.92
2R2o	2.20		125	58	17		59	29	1.20	1.50	1.15		1.63	2.41
2R4o	2.40		139			22			0.98			1.65		
2R5o	2.50			59	18					1.40	1.05			
2R7o	2.70			60	20	28				1.35	1.00	1.45		
3R3o	3.30		187	64	24	32	62	34	0.89	1.30	0.96	1.44	1.50	2.36
3R5o	3.50		210	127	25		73		0.85	1.30	0.95		1.34	
3R6o	3.60					35						1.43		
3R9o	3.90		220		33	37			0.78		0.87	1.32		
4R3o	4.30					43						1.00		
4R7o	4.70		240	146	39	45	87	45	0.71	1.10	0.78	0.97	1.14	1.87
5R1o	5.10					46						0.94		
5R6o	5.60		320	176	44			52	0.62	0.95	0.74			1.60
6R2o	6.20			220				62		0.91				1.55
6R8o	6.80		350	238	51	65	105	68	0.57	0.90	0.68	0.87	0.95	1.51
8R2o	8.20		470	272	65	91	139	75	0.52	0.80	0.57	0.77	0.90	1.40
100o	10.00	1KHz	570	299	92	105	150	90	0.47	0.70	0.43	0.70	0.76	1.33
120o	12.00		750	355	100	119		100	0.43	0.65	0.38	0.67		1.15
150o	15.00		810	472	113	140	210	142	0.38	0.61	0.33	0.54	0.63	1.05
180o	18.00		1060	500	125	175		162	0.35	0.58	0.30	0.50		0.95
220o	22.00		1150	592	146	201	275	208	0.32	0.52	0.28	0.48	0.56	0.86
270o	27.00		1670	630	176	227		238	0.29	0.44	0.26	0.40		0.80
330o	33.00		1840	1075	214	287	455	257	0.28	0.43	0.23	0.35	0.44	0.72
390o	39.00		2310		225	341		320	0.25		0.21	0.33		0.65
470o	47.00		2630	1309	304	430	730	352	0.22	0.34	0.19	0.32	0.35	0.62
560o	56.00		2860	1800	324	471		500	0.20	0.30	0.17	0.30		0.62
680o	68.00		3940	2613	472	532	935	525	0.18	0.25	0.16	0.27	0.30	0.51
820o	82.00		4900	2950	539	675		770	0.16	0.20	0.14	0.23		0.48
101o	100.00		5740	3255	608	850	1500	801	0.14	0.19	0.13	0.21	0.23	0.43
121o	120.00		7310	3350	757	1100	1910	850	0.13	0.15	0.12	0.20	0.22	0.34
151o	150.00		9080	3500	882	1230	2680	1100	0.12	0.12	0.11	0.17	0.21	0.26
181o	180.00		9500	4000	1130	1560	3040	1190	0.11	0.11	0.09	0.15	0.20	0.24
221o	220.00			4800	1269	1800	3520	1530		0.10	0.09	0.14	0.195	0.20
271o	270.00			5100	1570	2200	4380	1960		0.09	0.08	0.13	0.193	0.19
331o	330.00			7280	1930	2640	5560	2030		0.08	0.08	0.12	0.19	0.19
471o	470.00				2770	3820	7820	3500			0.07	0.10	0.18	0.15
102o	1000.0							8040						0.10
122o	1200.0							9100						0.09
152o	1500.0							13800						0.08
182o	1800.0							15000						0.065
222o	2200.0			59000				19000		0.035				0.05

■ Tolerance : M = 20% , N = 30%

■ IDC : Base on L drop 35% max. & Temp. rise up 40 deg.C max.

Product Series Code:	**GSMD**	Brand:	GOTREND
File Version:	GSMD-V1R1	Editor:	Teddy
Established Date:	2011.12.27	Description:	Shielding SMD power choke
Latest Edit Date:	2013.02.23		

* Features & Application :

1.Power supply PWM circuit input / output inductor
2.Power line noise suppression
3.DC-DC Converter
4.Shielding Structure for good in EMI effect
5.To help you go pass CE/FCC standard
6.MB / NB / IPC / LCD Monitor / STB / Network Device
7.Low Profile for all compact design

* Product Identify :

Pin Foot	EMI	Color	Made In
SMD	Shield	Black	China / Taiwan

RoHS Compliant – SGS Test Report

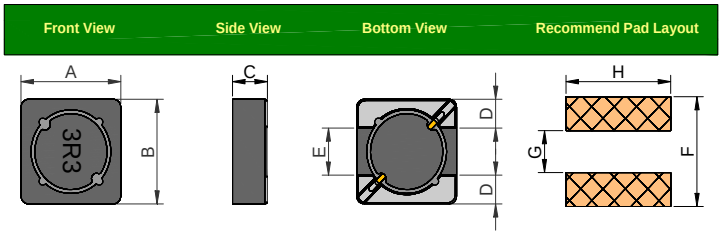
Pb	Cd	Hg	Cr+6	PBB	PBDE
<1000ppm	ND	ND	ND	ND	ND

* Part No. Example :

PN	GSMD	415	P	-	3R3	☐
ID	1	2	3		4	5

1 GOTREND Series Code
2 Dimension Code: 415 = (L) 4.0 x (W) 4.0 x (H) 1.5 mm
3 RoHS Compliant
4 Inductance : 3R3 = 3.3 uH
5 Tolerance : M = 20% ; N = 30%

* Dimensions : [mm]



Size Code	A (+/-0.2)	B (+/-0.2)	C (Max.)	D (Typ.)	E (Typ.)	F (Ref.)	G (Ref.)	H (Ref.)
415	4.00	4.00	1.50	1.10	1.80	4.20	1.60	4.20
418	4.00	4.00	1.80	1.10	1.80	4.20	1.60	4.20

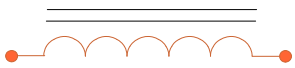
* Operating & Storage Condition :

1.Storage Condition -40 ~ +105 ° C / RH 65 ± 10%

2.Storage Life Time 6 Months @ 20 ° C / RH 65% (no seal off)

3.Operating Condition -40 ~ +105 ° C

* Schematic :



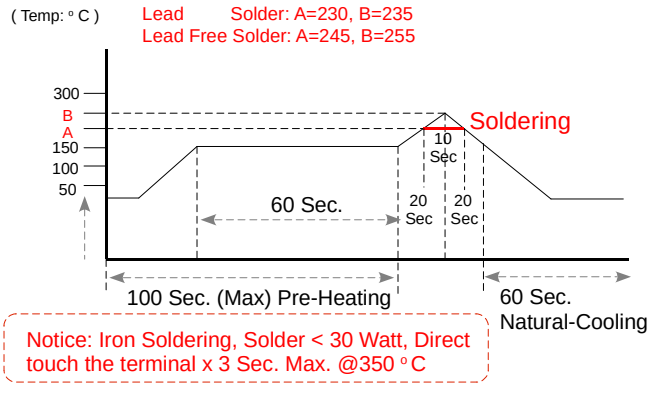
Attention & Caution:

* Keep out of splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condense
* Please be careful for the stress to this product by board flexure or something after the mounting.

* Test Condition :

Equipment	1.L – WK3260 LCR Meter 2.RDC – Twintex TM8089A 3.IDC – WK3260+3265B DC-Bias 4.Dimension - Mitutoyo 5.Temperature – TECPEL 305A
Ambient	Temperature 20 ± 5 ° C Humidity RH 65 ± 20%
	If there may be any doubt on the test result, Measurement shall be made within the following limits:
Ambient	Temperature 25 ± 5 ° C Humidity RH 75 ± 10%

* Recommend IR Reflow Curve : GTX-IR-FILE001



Notice: Iron Soldering, Solder < 30 Watt, Direct touch the terminal x 3 Sec. Max. @350 ° C

Product Series Code:	**GSMD**	Brand:	GOTREND
File Version:	GSMD-V1R1	Editor:	Teddy
Established Date:	2011.12.27	Description:	Shielding SMD power choke
Latest Edit Date:	2013.02.23		

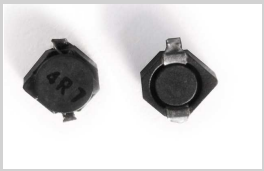
* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance M = ± 20% N = ± 30%	RDC (m Ohm / typ.)	RDC (m Ohm / max.)	Isat @ L-Drop 20% (Amp / max.)	Irms @△T=40 ℃ (Amp / max.)
GSMD415P-2R2□	2.2	M / N	52.0	70.0	2.50	2.30
GSMD415P-3R3□	3.3	M / N	68.0	80.0	2.00	2.00
GSMD415P-4R7□	4.7	M	80.0	100.0	1.50	1.50
GSMD415P-100□	10.0	M	190.0	228.0	1.00	0.95
GSMD415P-220□	22.0	M	390.0	450.0	0.85	0.80

■ L value test frequency : @ 100KHz / 0.1V
■ The Isat is the current at which the inductance decreases by 20% from the initial value
■ The Irms is the current at which the temperature rise is △T ≤ 40℃ ,whichever (Ta＝20℃).

GOTREND PN	Inductance (uH)	L-Tolerance M = ± 20% N = ± 30%	RDC (m Ohm / typ.)	RDC (m Ohm / max.)	Isat @ L-Drop 20% (Amp / max.)	Irms @△T=40 ℃ (Amp / max.)
GSMD418P-R56□	0.56	N	24.0	30.0	3.50	1.90
GSMD418P-1R0□	1.00	N	32.0	40.0	2.35	1.70
GSMD418P-1R6□	1.60	N	36.0	50.0	1.85	1.60
GSMD418P-2R2□	2.20	N	40.0	70.0	1.40	1.55
GSMD418P-2R5□	2.50	N	50.0	75.0	1.25	1.45
GSMD418P-3R3□	3.30	N	56.0	80.0	1.10	1.35
GSMD418P-3R6□	3.60	N	60.0	90.0	1.05	1.30
GSMD418P-3R9□	3.90	N	65.0	100.0	1.00	1.20
GSMD418P-4R7□	4.70	N	70.0	125.0	0.95	1.15
GSMD418P-5R6□	5.60	N	75.0	135.0	0.90	1.10
GSMD418P-100□	10.00	M	140.0	200.0	0.60	0.80
GSMD418P-150□	15.00	M	200.0	280.0	0.57	0.65
GSMD418P-180□	18.00	M	240.0	300.0	0.52	0.60
GSMD418P-220□	22.00	M	300.0	360.0	0.50	0.52
GSMD418P-330□	33.00	M	400.0	460.0	0.40	0.45
GSMD418P-470□	47.00	M	560.0	750.0	0.32	0.38
GSMD418P-680□	68.00	M	800.0	1070.0	0.27	0.30
GSMD418P-820□	82.00	M	1100.0	1220.0	0.25	0.25
GSMD418P-101□	100.00	M	1200.0	1640.0	0.22	0.22
GSMD418P-121□	120.00	M	1650.0	1880.0	0.20	0.18
GSMD418P-151□	150.00	M	2000.0	2450.0	0.18	0.16

■ L value test frequency : @ 100KHz / 0.1V
■ The Isat is the current at which the inductance decreases by 20% from the initial value
■ The Irms is the current at which the temperature rise is △T ≤ 40℃ ,whichever (Ta＝20℃).



Product Series Code	**GSSQ**	Brand	GOTREND
File Version	GSSQ-V3R6	Editor	Teddy
Established Date	2009.02.13	Description	SMD Power Choke
Latest Edit Date	2013.02.23		

Features & Application:

* LowPrifile SMD Choke
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* Mobil Device / Handheld Device / LowProfile Device / Panel...

Product Structure

SMD ▼ DIP ▼ Shield Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example:

GSSQ 320 P LD - 6R3 N

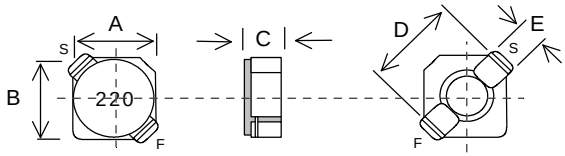
1 2 3 4 5 6

1. GOTREND Series : GSSQ
2. Dimension Code 3.2x3.2x2.0
3. P=Pb free<1000ppm
4. LD=Low DCR Type
5. [L] Value : Inductance
6. Tolerance: N=30%,M=20%

Custom Design Spec : @ 100KHz,1V			
P/N	Inductance	RDC (max)	IDC (max)

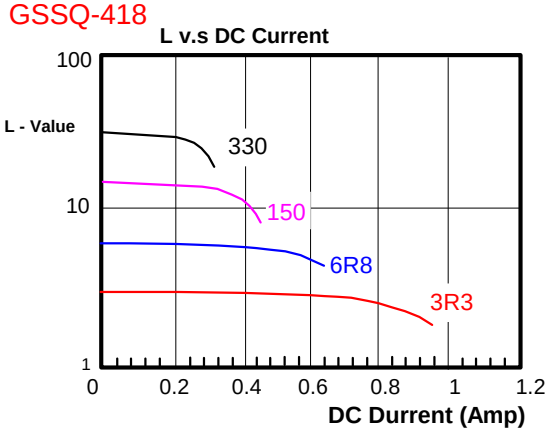
Dimensions:[mm]

MECHANICAL ASSEMBL & MARKING

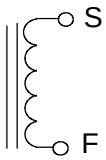


Type	A max	B max	C max	D Ref	E Ref
310	3.3	3.3	1.10	4.4	1.3
312	3.3	3.3	1.30	4.4	1.3
315	3.3	3.3	1.55	4.4	1.3
320	3.2	3.2	2.00	4.4	1.3
418	4.2	4.2	1.80	5.5	1.5

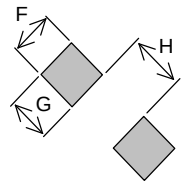
GSSQ-418



Schematic:



Recommend Pad Layout:



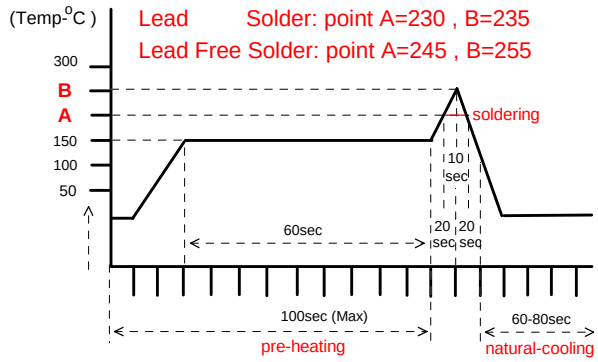
	F	G	H
310	1.4	1.3	1.7
312	1.4	1.3	1.7
315	1.4	1.3	1.7
320	1.4	1.3	1.7
418	1.5	1.4	2.4

Test Equipment :

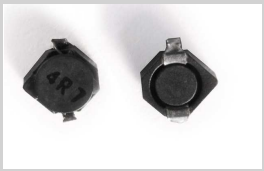
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15ºC
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5ºC
Relative Humidity:75+/-10%

Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260° C



Product Series Code	**GSSQ**	Brand	GOTREND
File Version	GSSQ-V3R6	Editor	Teddy
Established Date	2009.02.13	Description	SMD Power Choke
Latest Edit Date	2013.02.23		

Operatiing & Storage Condition:

OPERATING TEMP:-40~+85ºC

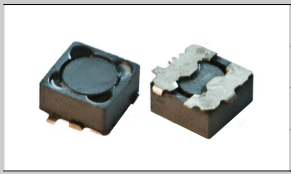
STORAGE TEMP:-40~+85ºC
STORAGE LIFE TIME: 12 MONTH @25ºC , RH 65%

Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exced the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

L CODE	L (uH)	D.C.R (mΩ)(max) / I.D.C(Amp)(max)											
		GSSQ310P		GSSQ312P		GSSQ315P		GSSQ320P		GSSQ320PLD		GSSQ418P	
R20 ☐	0.20							22	5.35				
R36 ☐	0.36							29	4.62				
R47 ☐	0.47					35	2.1						
R56 ☐	0.56							33	3.75				
R82 ☐	0.82							39	2.91				
1R0 ☐	1.0					58	1.95					43.2	1.68
1R1 ☐	1.1							43	2.50				
1R5 ☐	1.5			68	0.90	63	1.80					52	1.55
1R7 ☐	1.7							44	1.85				
1R8 ☐	1.8					75	1.65						
2R2 ☐	2.2	144	0.73	98	0.78	94	1.50	60	1.60	41	0.85	72	1.20
2R7 ☐	2.7					106	1.35						
3R3 ☐	3.3	195	0.63	123	0.60	125	1.20	86	1.45	54	0.75	85	1.10
3R9 ☐	3.9					138	1.10						
4R7 ☐	4.7	288	0.54	170	0.50	169	1.00	140	1.20	78	0.63	105	0.90
5R6 ☐	5.6					188	0.95						
6R3 ☐	6.3							160	1.05				
6R8 ☐	6.8	425	0.45	260	0.44	213	0.85			106	0.52	170	0.73
8R2 ☐	8.2	475	0.41			281	0.80	245	0.85				
100 ☐	10	538	0.36	400	0.35	294	0.70			180	0.43	210	0.55
120 ☐	12					394	0.62						
150 ☐	15	750	0.31					345	0.70	220	0.35	295	0.45
220 ☐	22	1560	0.26	748	0.22	781	0.40			320	0.30	430	0.40
330 ☐	33	1680	0.21							460	0.24	660	0.32
470 ☐	47									660	0.20	1000	0.26
680 ☐	68					2760	0.25						
820 ☐	82					3000	0.20						
101 ☐						5350	0.15	2972	0.162				

* Measuring Freq.(L): GSSQ-310P / 312P / 315P / 320P / 320PLD / 418P@100KHz / 1V : Test Instrument: HP4286A
* Tolerance Code: GSSQ-310P / 312P / 320PLD / 418P@M=+/-20%, N=+/-30%. GSSQ-320P@0.2~1.1uH N=+/-35%, 1.7~15uH N=+/-30%.



Product Series Code:	**GLP**	Brand:	GOTREND
File Version:	GLP-V2R2	Editor:	Teddy
Established Date:	2009.06.30	Description:	Shielding Choke
Latest Edit Date:	2013.02.23		

* Features & Application:

1.Power supply PWM circuit input / output inductor
2.Power line noise suppression
3.DC-DC Converter
4.Shielding Structure for good in EMI effect
5.To help you go pass CE/FCC standard
6.MB / NB / IPC / LCD Monitor / STB / Network Device
7.Low Profile for all compact design

* Product Identify:

Pin Foot	EMI	Color	Made In
SMD	Shield	Black	China / Taiwan

RoHS Compliant – SGS Test Report

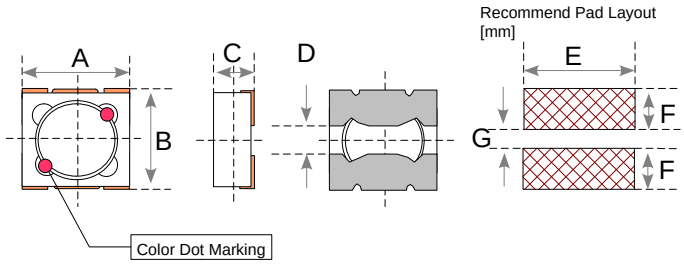
Pb	Cd	Hg	Cr+6	PBB	PBDE
<1000ppm	ND	ND	ND	ND	ND

* Part No. Example:

PN	GLP	3210	P	[ ]	-	2R2	M	[ ]
ID	1	2	3	4		5	6	7

1 GOTREND Series Code
2 Dimension Code: 3210 = (L) 3.2 x (W) 3.2 x (H) 1.0 mm
3 RoHS Compliance
4 Special Code for Series — L= Low DC Resistance, H= High Current
5 Inductance : 2R2 = 2.2uH Ex: 100=10uH, 101=100uH
6 Tolerance: M=20%, N=30%
7 Special Code for specific item : S=Custom Design
8 Serial Number for Special Code

* Dimensions: [mm]

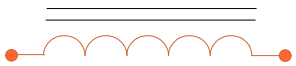


Type	Size Code	A ± 0.2	B ± 0.2	C (Max)	D (Ref.)	E (Ref.)	F (Ref.)	G (Ref.)
GLP	3210	3.2	3.2	1.05	1.2	3.6	1.2	1.2
GLP	3216	3.2	3.2	1.60	1.2	3.6	1.2	1.2
GLP	3218	3.2	3.2	1.80	1.2	3.6	1.2	1.2
GLP	3810	3.8	3.8	1.05	1.2	4.2	1.5	1.2
GLP	3818	3.8	3.8	1.85	1.2	4.2	1.5	1.2
GLP	4212	4.2	4.2	1.15+/-0.1	1.6	4.6	1.6	1.4
GLP	4216	4.2	4.2	1.60	1.6	4.6	1.6	1.4
GLP	4218	4.2	4.2	1.80	1.6	4.6	1.6	1.4

* Operating & Storage Condition:

1.Storage Condition -40 ~ +85 ° C / RH 65 ± 10%
2.Storage Life Time 6 Months @ 20 ° C / RH 65% (no seal off)
3.Operating Condition -40 ~ +105 ° C (Including self-temperature rise)

* Schematic:



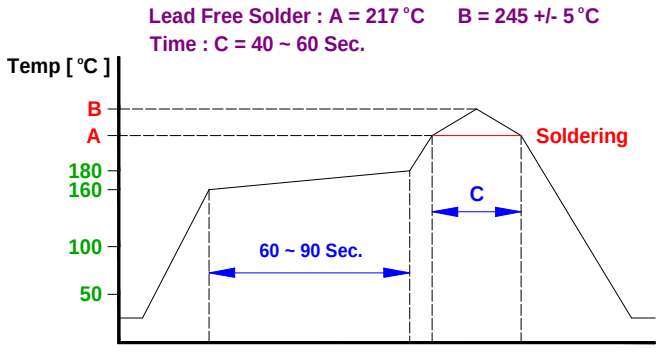
Attention & Caution:

* Keep out of splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condense
* Please be careful for the stress to this product by board flexure or something after the mounting.

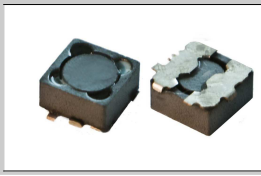
* Test Condition:

Equipment	1.L – WK3260 LCR Meter 2.RDC – Twintex TM8089A 3.IDC – WK3260+3265B DC-Bias 4.Dimension - Mitutoyo 5.Temperature – TECPEL 305A
Ambient	Temperature 20 ± 5 ° C Humidity RH 65 ± 20%
	If there may be any doubt on the test result, Measurement shall be made within the following limits:
Ambient	Temperature 25 ± 5 ° C Humidity RH 75 ± 10%

* Recommend IR Reflow Curve: GTX-IR-FILE001



Notice : Iron Soldering , Solder < 30 Watt , Direct touch the terminal x 3 Sec. Max. @ 350 °C



Product Series Code:	**GLP**	Brand:	GOTREND
File Version:	GLP-V2R2	Editor:	Teddy
Established Date:	2009.06.30	Description:	Shielding Choke
Latest Edit Date:	2013.02.23		

GOTREND PN	Inductance @ 1KHz / 0.25V (uH)	L-Tolerance M = ± 20% N = ± 30%	Isat-1 @ L-Drop 10% (mA / ± 20%)	Isat-2 @ L-Drop 35% (mA / ± 20%)	Irms @ Temperature Rise 25 C (mA / ± 20%)	RDC (ohm / Typ.)	RDC (ohm / Max)	Color Code Marking
GLP3210P-1R2☐	1.2	M/N	1000	1400	1500	0.080	0.096	Black
GLP3210P-1R5☐	1.5	M/N	1000	1360	1400	0.090	0.108	Brown
GLP3210P-1R8☐	1.8	M/N	900	1240	1350	0.100	0.120	Red
GLP3210P-2R2☐	2.2	M/N	860	1080	1250	0.110	0.132	Orange
GLP3210P-2R7☐	2.7	M/N	760	940	1100	0.130	0.156	Yellow
GLP3210P-3R3☐	3.3	M/N	680	880	1000	0.180	0.216	Green
GLP3210P-3R9☐	3.9	M/N	620	840	900	0.200	0.240	Blue
GLP3210P-4R7☐	4.7	M/N	600	820	850	0.270	0.324	Violet
GLP3210P-5R6☐	5.6	M/N	540	720	750	0.320	0.384	Gray
GLP3210P-6R8☐	6.8	M/N	460	600	700	0.330	0.396	White
GLP3210P-8R2☐	8.2	M/N	440	580	650	0.420	0.500	Black
GLP3210P-100☐	10.0	M	420	540	600	0.470	0.560	Brown
GLP3210P-120☐	12.0	M	320	440	550	0.680	0.816	Red
GLP3210P-150☐	15.0	M	300	400	500	0.800	0.960	Orange
GLP3210P-180☐	18.0	M	300	380	450	0.890	1.086	Yellow
GLP3210P-220☐	22.0	M	260	320	400	1.100	1.320	Green
GLP3210P-330☐	33.0	M	220	280	340	1.600	1.920	Blue

GOTREND PN	Inductance @ 1KHz / 0.25V (uH)	L-Tolerance M = ± 20% N = ± 30%	Isat-1 @ L-Drop 10% (mA / ± 20%)	Isat-2 @ L-Drop 35% (mA / ± 20%)	Irms @ Temperature Rise 25 C (mA / ± 20%)	RDC (ohm / Typ.)	RDC (ohm / Max)	Color Code Marking
GLP3216PL-1R0☐	1.0	M/N	1040	1400	1800	0.040	0.048	Green
GLP3216PL-1R2☐	1.2	M/N	1000	1300	1740	0.040	0.048	Blue
GLP3216PL-1R5☐	1.5	M/N	940	1220	1700	0.050	0.060	Violet
GLP3216PL-1R8☐	1.8	M/N	920	1160	1640	0.060	0.072	Gray
GLP3216PL-2R2☐	2.2	M/N	880	1100	1600	0.070	0.084	White
GLP3216PL-2R7☐	2.7	M/N	740	930	1450	0.070	0.084	Green
GLP3216PL-3R3☐	3.3	M/N	680	900	1240	0.090	0.108	Blue
GLP3216PL-3R9☐	3.9	M/N	620	820	1120	0.120	0.144	Violet
GLP3216PL-4R7☐	4,7	M/N	600	740	1100	0.130	0.156	Gray
GLP3216PL-5R6☐	5.6	M/N	580	700	1060	0.160	0.192	White
GLP3216PL-6R8☐	6.8	M/N	420	620	1000	0.170	0.204	Green
GLP3216PL-8R2☐	8.2	M/N	400	580	900	0.230	0.276	Blue
GLP3216PL-100☐	10.0	M	380	500	800	0.244	0.293	Violet
GLP3216PL-120☐	12.0	M	360	440	700	0.320	0.384	Gray
GLP3216PL-150☐	15.0	M	360	420	700	0.370	0.444	White
GLP3216PL-180☐	18.0	M	300	380	620	0.490	0.588	Green
GLP3216PL-220☐	22.0	M	260	340	480	0.450	0.540	Blue

Product Series Code:	**GLP**	Brand:	GOTREND
File Version:	GLP-V2R2	Editor:	Teddy
Established Date:	2009.06.30	Description:	Shielding Choke
Latest Edit Date:	2013.02.23		

GOTREND PN	Inductance @ 1KHz / 0.25V (uH)	L-Tolerance M = ± 20% N = ± 30%	Isat-1 @ L-Drop 10% (mA / ± 20%)	Isat-2 @ L-Drop 35% (mA / ± 20%)	Irms @ Temperature Rise 25 C (mA / ± 20%)	RDC (ohm / Typ.)	RDC (ohm / Max)	Color Code Marking
GLP3216PH-R47☐	0.47	N	3000	3400	2200	0.040	0.048	Pink
GLP3216PH-1R0☐	1.0	M/N	2600	3000	2000	0.050	0.060	Pink
GLP3216PH-1R2☐	1.2	N	2300	2500	1900	0.083	0.100	Brown
GLP3216PH-1R5☐	1.5	M/N	2100	2500	1500	0.090	0.108	Brown
GLP3216PH-2R2☐	2.2	M/N	1800	2100	1280	0.090	0.108	Red
GLP3216PH-2R7☐	2.7	M/N	1600	1800	1200	0.120	0.144	White
GLP3216PH-3R3☐	3.3	M/N	1500	1720	1100	0.150	0.180	Orange
GLP3216PH-3R9☐	3.9	M/N	1400	1560	1020	0.160	0.192	Yellow
GLP3216PH-4R7☐	4.7	M/N	1300	1500	960	0.200	0.240	Black
GLP3216PH-5R6☐	5.6	M/N	1200	1300	940	0.232	0.278	Black
GLP3216PH-6R8☐	6.8	M/N	1100	1300	840	0.270	0.324	Brown
GLP3216PH-100☐	10.0	M	940	1100	740	0.400	0.480	Red
GLP3216PH-150☐	15.0	M	760	860	600	0.570	0.684	Orange
GLP3216PH-220☐	22.0	M	600	680	460	0.910	1.092	Yellow
GLP3216PH-330☐	33.0	M	440	480	400	1.486	1.783	Black
GLP3216PH-470☐	47.0	M	400	440	260	1.814	2.177	Brown
GLP3216PH-680☐	68.0	M	290	330	260	3.520	4.224	Orange
GLP3216PH-101☐	100.0	M	240	280	240	3.840	4.608	Black

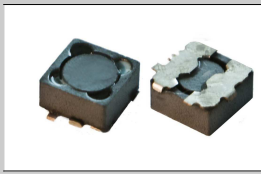
GOTREND PN	Inductance @ 1KHz / 0.25V (uH)	L-Tolerance M = ± 20% N = ± 30%	Isat-1 @ L-Drop 10% (mA / ± 20%)	Isat-2 @ L-Drop 35% (mA / ± 20%)	Irms @ Temperature Rise 25 C (mA / ± 20%)	RDC (ohm / Typ.)	RDC (ohm / Max)	Color Code Marking
GLP3218PL-1R0☐	1.0	M/N	960	1360	1800	0.038	0.045	Green
GLP3218PL-1R2☐	1.2	M/N	940	1220	1760	0.040	0.048	Blue
GLP3218PL-1R5☐	1.5	M/N	900	1140	1700	0.050	0.060	Violet
GLP3218PL-1R8☐	1.8	M/N	840	1040	1680	0.050	0.060	Gray
GLP3218PL-2R2☐	2.2	M/N	840	980	1640	0.060	0.072	White
GLP3218PL-2R7☐	2.7	M/N	680	900	1460	0.060	0.072	Green
GLP3218PL-3R3☐	3.3	M/N	600	800	1400	0.080	0.096	Blue
GLP3218PL-3R9☐	3.9	M/N	580	800	1220	0.090	0.108	Violet
GLP3218PL-4R7☐	4.7	M/N	540	740	1200	0.100	0.120	Gray
GLP3218PL-5R6☐	5.6	M/N	500	660	1120	0.110	0.132	White
GLP3218PL-6R8☐	6.8	M/N	480	600	1060	0.120	0.144	Green
GLP3218PL-8R2☐	8.2	M/N	400	540	900	0.168	0.202	Blue
GLP3218PL-100☐	10.0	M	360	460	880	0.190	0.228	Violet
GLP3218PL-120☐	12.0	M	320	460	800	0.220	0.264	Gray
GLP3218PL-150☐	15.0	M	300	400	720	0.290	0.348	White
GLP3218PL-180☐	18.0	M	280	380	660	0.350	0.420	Green
GLP3218PL-220☐	22.0	M	240	320	500	0.440	0.528	Blue
GLP3218PL-270☐	27.0	M	220	280	420	0.490	0.588	Violet

Product Series Code:	**GLP**	Brand:	GOTREND
File Version:	GLP-V2R2	Editor:	Teddy
Established Date:	2009.06.30	Description:	Shielding Choke
Latest Edit Date:	2013.02.23		

GOTREND PN	Inductance @ 1KHz / 0.25V (uH)	L-Tolerance M = ± 20% N = ± 30%	Isat-1 @ L-Drop 10% (mA / ± 20%)	Isat-2 @ L-Drop 35% (mA / ± 20%)	Irms @ Temperature Rise 25 C (mA / ± 20%)	RDC (ohm / Typ.)	RDC (ohm / Max)	Color Code Marking
GLP3218PH-1R0☐	1.0	M/N	3000	3400	2160	0.050	0.060	Black
GLP3218PH-1R8☐	1.8	M/N	2400	2800	1760	0.080	0.096	Brown
GLP3218PH-2R2☐	2.2	M/N	1800	2140	1440	0.090	0.108	Red
GLP3218PH-3R3☐	3.3	M/N	1500	1800	1100	0.100	0.120	Orange
GLP3218PH-3R9☐	3.9	M/N	1500	1780	1050	0.120	0.144	Yellow
GLP3218PH-4R7☐	4.7	M/N	1400	1600	1000	0.150	0.180	Black
GLP3218PH-6R8☐	6.8	M/N	1200	1400	950	0.220	0.264	Brown
GLP3218PH-100☐	10.0	M	920	1020	780	0.360	0.432	Red
GLP3218PH-120☐	12.0	M	840	980	680	0.410	0.492	Orange
GLP3218PH-150☐	15.0	M	800	900	620	0.620	0.744	Yellow
GLP3218PH-220☐	22.0	M	640	740	450	0.750	0.900	Black

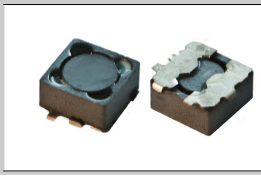
GOTREND PN	Inductance @ 1KHz / 0.25V (uH)	L-Tolerance M = ± 20% N = ± 30%	Isat-1 @ L-Drop 10% (mA / ± 20%)	Isat-2 @ L-Drop 35% (mA / ± 20%)	Irms @ Temperature Rise 25 C (mA / ± 20%)	RDC (ohm / Typ.)	RDC (ohm / Max)	Color Code Marking
GLP3810PL-1R0☐	1.0	M/N	1700	2200	2000	0.059	0.071	Green
GLP3810PL-1R5☐	1.5	M/N	1400	1700	1600	0.089	0.107	Blure
GLP3810PL-2R2☐	2.2	M/N	1100	1400	1200	0.128	0.154	Violet
GLP3810PL-3R3☐	3.3	M/N	980	1120	940	0.194	0.233	Gray
GLP3810PL-4R7☐	4.7	M/N	800	940	820	0.237	0.285	White
GLP3810PL-6R8☐	6.8	M/N	660	780	720	0.377	0.453	Green
GLP3810PL-100☐	10.0	M	560	680	660	0.541	0.650	Blue
GLP3810PL-150☐	15.0	M	440	520	480	0.790	0.948	Violet
GLP3810PL-220☐	22.0	M	360	440	420	1.205	1.446	Gray

GOTREND PN	Inductance @ 1KHz / 0.25V (uH)	L-Tolerance M = ± 20% N = ± 30%	Isat-1 @ L-Drop 10% (mA / ± 20%)	Isat-2 @ L-Drop 35% (mA / ± 20%)	Irms @ Temperature Rise 25 C (mA / ± 20%)	RDC (ohm / Typ.)	RDC (ohm / Max)	Color Code Marking
GLP3810PH-1R0☐	1.0	M/N	2200	2400	1500	0.110	0.132	Black
GLP3810PH-1R5☐	1.5	M/N	1960	2140	1300	0.150	0.180	Brown
GLP3810PH-2R2☐	2.2	M/N	1660	1800	1020	0.212	0.254	Red
GLP3810PH-3R3☐	3.3	M/N	1420	1520	880	0.310	0.372	Orange
GLP3810PH-4R7☐	4.7	M/N	1280	1380	800	0.390	0.468	Yellow
GLP3810PH-6R8☐	6.8	M/N	1000	1080	600	0.580	0.696	Black
GLP3810PH-100☐	10.0	M	760	820	420	1.029	1.235	Brown
GLP3810PH-150☐	15.0	M	680	740	360	1.350	1.620	Red
GLP3810PH-220☐	22.0	M	520	560	300	2.030	2.436	Orange
GLP3810PH-270☐	27.0	M	480	520	280	2.399	2.879	Yellow
GLP3810PH-330☐	33.0	M	420	460	240	2.860	3.432	Black



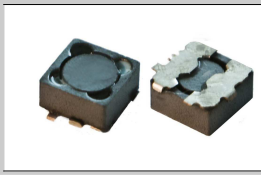
Product Series Code:	**GLP**	Brand:	GOTREND
File Version:	GLP-V2R2	Editor:	Teddy
Established Date:	2009.06.30	Description:	Shielding Choke
Latest Edit Date:	2013.02.23		

GOTREND PN	Inductance @ 1KHz / 0.25V (uH)	L-Tolerance M = ± 20% N = ± 30%	Isat-1 @ L-Drop 10% (mA / ± 20%)	Isat-2 @ L-Drop 35% (mA / ± 20%)	Irms @ Temperature Rise 25 C (mA / ± 20%)	RDC (ohm / Typ.)	RDC (ohm / Max)	Color Code Marking
GLP3818P□-R56□	0.56	N	3600	3900	3100	0.040	0.050	Black
GLP3818P□-1R0□	1.0	M/N	3200	3500	2300	0.046	0.055	Black
GLP3818P□-1R2□	1.2	M/N	3120	3400	2300	0.050	0.060	Brown
GLP3818P□-1R5□	1.5	M/N	2700	3100	2100	0.050	0.060	Red
GLP3818P□-1R8□	1.8	M/N	2500	2700	1780	0.080	0.096	Orange
GLP3818P□-2R2□	2.2	M/N	2300	2500	1660	0.090	0.108	Yellow
GLP3818P□-2R7□	2.7	M/N	2080	2260	1380	0.097	0.116	Green
GLP3818P□-3R3□	3.3	M/N	1840	2040	1240	0.120	0.144	Blue
GLP3818P□-3R9□	3.9	M/N	1740	1940	1180	0.126	0.151	Violet
GLP3818P□-4R7□	4.7	M/N	1560	1700	1100	0.150	0.180	Gray
GLP3818P□-5R6□	5.6	M/N	1460	1660	1000	0.163	0.196	White
GLP3818P□-6R8□	6.8	M/N	1340	1480	940	0.203	0.244	Black
GLP3818P□-8R2□	8.2	M/N	1180	1260	880	0.259	0.311	Brown
GLP3818P□-100□	10.0	M	1100	1200	860	0.286	0.343	Red
GLP3818P□-120□	12.0	M	1020	1120	800	0.330	0.396	Orange
GLP3818P□-150□	15.0	M	920	1020	780	0.440	0.528	Yellow
GLP3818P□-180□	18.0	M	840	960	580	0.512	0.614	Green
GLP3818P□-220□	22.0	M	780	880	560	0.555	0.666	Blue
GLP3818P□-270□	27.0	M	660	740	460	0.747	0.896	Violet
GLP3818P□-330□	33.0	M	580	660	400	1.030	1.236	Gray
GLP3818P□-390□	39.0	M	560	640	380	1.130	1.356	While
GLP3818P□-470□	47.0	M	500	560	340	1.280	1.536	Black



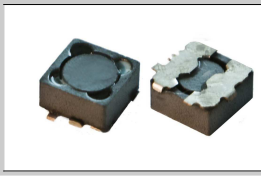
Product Series Code:	**GLP**	Brand:	GOTREND
File Version:	GLP-V2R2	Editor:	Teddy
Established Date:	2009.06.30	Description:	Shielding Choke
Latest Edit Date:	2013.02.23		

GOTREND PN	Inductance @ 1KHz / 0.25V (uH)	L-Tolerance M = ± 20% N = ± 30%	Isat-1 @ L-Drop 10% (mA / ± 20%)	Isat-2 @ L-Drop 35% (mA / ± 20%)	Irms @ Temperature Rise 25 C (mA / ± 20%)	RDC (ohm / Typ.)	RDC (ohm / Max)	Color Code Marking
GLP4212P☐-1R0☐	1.0	M/N	2300	3000	2000	0.050	0.060	Black
GLP4212P☐-1R2☐	1.2	M/N	2200	2800	1900	0.050	0.060	Brown
GLP4212P☐-1R5☐	1.5	M/N	1900	2400	1800	0.060	0.072	Red
GLP4212P☐-1R8☐	1.8	M/N	1800	2300	1750	0.070	0.084	Orange
GLP4212P☐-2R2☐	2.2	M/N	1700	2100	1750	0.080	0.096	Yellow
GLP4212P☐-2R7☐	2.7	M/N	1400	1700	1440	0.110	0.132	Green
GLP4212P☐-3R3☐	3.3	M/N	1300	1700	1400	0.120	0.144	Blue
GLP4212P☐-3R9☐	3.9	M/N	1260	1600	1300	0.140	0.168	Violet
GLP4212P☐-4R7☐	4.7	M/N	1240	1580	1200	0.160	0.192	Gray
GLP4212P☐-5R6☐	5.6	M/N	1000	1300	1000	0.210	0.252	White
GLP4212P☐-6R8☐	6.8	M/N	1000	1300	960	0.220	0.264	Black
GLP4212P☐-8R2☐	8.2	M/N	920	1140	940	0.250	0.300	Brown
GLP4212P☐-100☐	10.0	M	860	1060	900	0.330	0.396	Red
GLP4212P☐-120☐	12.0	M	800	980	820	0.360	0.432	Orange
GLP4212P☐-150☐	15.0	M	600	800	640	0.520	0.624	Yellow
GLP4212P☐-180☐	18.0	M	560	760	600	0.625	0.750	Green
GLP4212P☐-220☐	22.0	M	460	640	520	0.732	0.878	Blue
GLP4212P☐-330☐	33.0	M	420	500	420	1.165	1.398	Violet



Product Series Code:	**GLP**	Brand:	GOTREND
File Version:	GLP-V2R2	Editor:	Teddy
Established Date:	2009.06.30	Description:	Shielding Choke
Latest Edit Date:	2013.02.23		

GOTREND PN	Inductance @ 1KHz / 0.25V (uH)	L-Tolerance M = ± 20% N = ± 30%	Isat-1 @ L-Drop 10% (mA / ± 20%)	Isat-2 @ L-Drop 35% (mA / ± 20%)	Irms @ Temperature Rise 25 C (mA / ± 20%)	RDC (ohm / Typ.)	RDC (ohm / Max)	Color Code Marking
GLP4216P□-1R0□	1.0	M/N	2300	3000	2400	0.040	0.048	Black
GLP4216P□-1R2□	1.2	M/N	2200	2800	2340	0.040	0.048	Brown
GLP4216P□-1R5□	1.5	M/N	2000	2600	2300	0.050	0.060	Red
GLP4216P□-1R8□	1.8	M/N	1660	2300	2100	0.060	0.072	Orange
GLP4216P□-2R2□	2.2	M/N	1600	2200	2000	0.070	0.084	Yellow
GLP4216P□-2R7□	2.7	M/N	1400	2000	1600	0.080	0.096	Green
GLP4216P□-3R3□	3.3	M/N	1340	2000	1600	0.090	0.108	Blue
GLP4216P□-3R9□	3.9	M/N	1200	1800	1500	0.100	0.120	Violet
GLP4216P□-4R7□	4.7	M/N	1140	1600	1400	0.140	0.168	Gray
GLP4216P□-5R6□	5.6	M/N	1060	1460	1200	0.150	0.180	White
GLP4216P□-6R8□	6.8	M/N	1000	1400	1150	0.170	0.204	Black
GLP4216P□-8R2□	8.2	M/N	940	1280	1100	0.200	0.240	Brown
GLP4216P□-100□	10.0	M	900	1160	1020	0.230	0.276	Red
GLP4216P□-120□	12.0	M	880	1080	900	0.280	0.336	Orange
GLP4216P□-150□	15.0	M	640	860	720	0.340	0.408	Yellow
GLP4216P□-180□	18.0	M	600	820	680	0.380	0.456	Green
GLP4216P□-220□	22.0	M	540	740	650	0.500	0.600	Blue
GLP4216P□-270□	27.0	M	500	700	550	0.735	0.882	Violet
GLP4216P□-330□	33.0	M	460	580	480	0.890	1.068	Gray
GLP4216P□-390□	39.0	M	400	560	420	1.000	1.200	White
GLP4216P□-470□	47.0	M	340	520	350	1.150	1.380	Black



Product Series Code:	**GLP**	Brand:	GOTREND
File Version:	GLP-V2R2	Editor:	Teddy
Established Date:	2009.06.30	Description:	Shielding Choke
Latest Edit Date:	2013.02.23		

GOTREND PN	Inductance @ 1KHz / 0.25V (uH)	L-Tolerance M = ± 20% N = ± 30%	Isat-1 @ L-Drop 10% (mA / ± 20%)	Isat-2 @ L-Drop 35% (mA / ± 20%)	Irms @ Temperature Rise 25 C (mA / ± 20%)	RDC (ohm / Typ.)	RDC (ohm / Max)	Color Code Marking
GLP4218P□-1R0□	1.0	M/N	2600	3200	2400	0.040	0.048	PINK
GLP4218P□-1R2□	1.2	M/N	2400	3000	2200	0.040	0.048	Brown
GLP4218P□-1R5□	1.5	M/N	2200	2700	2200	0.050	0.060	Red
GLP4218P□-1R8□	1.8	M/N	1900	2400	2000	0.060	0.072	Orange
GLP4218P□-2R2□	2.2	M/N	1800	2200	1900	0.060	0.072	Yellow
GLP4218P□-2R7□	2.7	M/N	1700	2100	1800	0.070	0.084	Green
GLP4218P□-3R3□	3.3	M/N	1500	1880	1650	0.080	0.096	Blue
GLP4218P□-3R9□	3.9	M/N	1400	1800	1560	0.080	0.096	Violet
GLP4218P□-4R7□	4.7	M/N	1220	1460	1400	0.100	0.120	Gray
GLP4218P□-5R6□	5.6	M/N	1160	1480	1300	0.110	0.132	White
GLP4218P□-6R8□	6.8	M/N	1020	1260	1200	0.130	0.156	PINK
GLP4218P□-8R2□	8.2	M/N	1000	1240	1150	0.150	0.180	Brown
GLP4218P□-100□	10.0	M	900	1100	1050	0.170	0.204	Red
GLP4218P□-120□	12.0	M	840	1000	800	0.250	0.300	Orange
GLP4218P□-150□	15.0	M	740	880	720	0.320	0.384	Yellow
GLP4218P□-180□	18.0	M	700	840	680	0.360	0.432	Green
GLP4218P□-220□	22.0	M	600	740	650	0.420	0.504	Blue
GLP4218P□-270□	27.0	M	560	700	600	0.450	0.540	Violet
GLP4218P□-330□	33.0	M	460	580	580	0.620	0.744	Gray
GLP4218P□-390□	39.0	M	450	560	480	0.650	0.780	White
GLP4218P□-470□	47.0	M	430	520	450	0.790	0.948	PINK
GLP4218P□-560□	56.0	M	380	480	400	0.862	1.034	Brown
GLP4218P□-680□	68.0	M	300	400	360	0.975	1.170	Red
GLP4218P□-101□	100.0	M	260	320	360	1.380	1.656	Yellow
GLP4218P□-222□	2200.0	M	60	70	70	43.000	51.600	PINK

Product Series Code	**GSCR**	Brand	GOTREND
File Version	GSCR-V2R1	Editor	Robert
Established Date	2000.09.28	Description	LowProfile Ceramic RI Choke
Latest Edit Date	2013.02.23		

Features & Application:

* Ceramic RI Base Low Profile Choke

* Fit for power line in/out switching circuit.

* To help you go pass the CE/FCC standard.

* Mobile Device / Handheld Device / LowProfile Device / Panel...

Product Structure

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example:

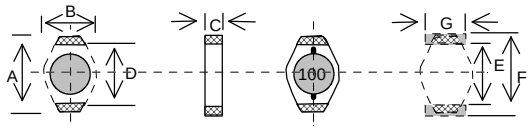
GSCR	2506F	P	K	-	100	M
1	2	3	4		5	6

1.GOTREND Series : GSCR
2.Size Code : 1604F/1606F/2506F
3.P=Pb free < 1000ppm
4.K=Material Code
5.L :Ex:6R8=6.8uH; 100=10 uH
6.Tolerance: K=10%,, M=20%

Dimensions: [mm]

Suggest PadLayout

MECHANICAL ASSEMBLY:



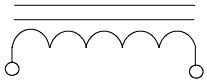
Type	A max	B max	C max	D max	E ref	F ref	G ref
1604F	6.60	5.50	1.00	5.10	4.10	7.00	3.60
1704F	6.60	5.50	1.00	5.10	4.10	7.00	3.60
1606F	6.45	5.60	1.80	5.10	4.10	6.85	3.60
2506F	9.14	7.87	1.65	7.40	7.40	9.65	5.84

Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15°C
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:75+/-10%

SCHEMATIC:



Operating & Storage Condition:

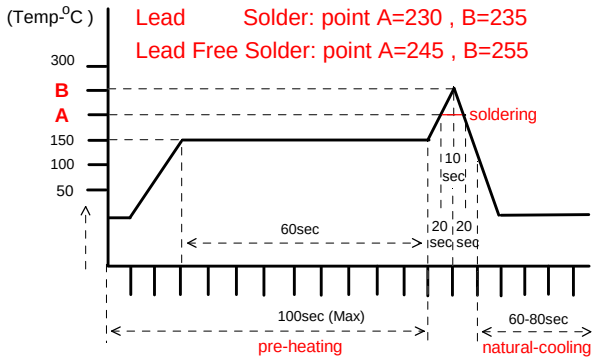
OPERATING TEMP:-40~+85°C

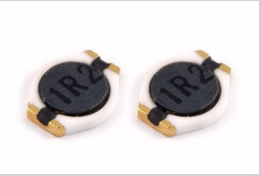
STORAGE TEMP:-40~+85°C
STORAGE LIFE TIME: 12 MONTH @25°C , RH 65%

Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Recommand Reflow Curve (TIME:Second)





Product Series Code	**GSCR**	Brand	GOTREND
File Version	GSCR-V2R1	Editor	Robert
Established Date	2000.09.28	Description	LowProfile Ceramic RI Choke
Latest Edit Date	2013.02.23		

PART NO.	L(uH)+/-20%(1)	DCR (ohm) max	S.R.F ref (MHz)	I sat(2) (A)	I rms(3) (A)
GSCR- 1604F- 1R2M	1.2	0.08	190	2.10	3.60
GSCR- 1604F- 1R5M	1.5	0.10	140	1.90	2.80
GSCR- 1604F- 2R2M	2.2	0.12	115	1.60	2.40
GSCR- 1604F- 3R3M	3.3	0.16	90	1.30	2.00
GSCR- 1604F- 4R7M	4.7	0.20	88	1.10	1.70
GSCR- 1604F- 6R8M	6.8	0.32	66	0.90	1.20
GSCR- 1604F- 100M	10.0	0.41	55	0.80	1.10
GSCR- 1604F- 150M	15.0	0.55	42	0.65	0.90
GSCR- 1604F- 220M	22.0	0.85	38	0.50	0.83
GSCR- 1604F- 330M	33.0	1.30	29	0.40	0.62
GSCR- 1604F- 470M	47.0	1.80	22	0.35	0.52
GSCR- 1604F- 680M	68.0	2.50	18	0.30	0.35
GSCR- 1604F- 101M	100.0	3.50	14	0.25	0.27
GSCR- 1604F- 151M	150.0	5.00	12	0.18	0.24
GSCR- 1604F- 221M	220.0	7.00	10	0.16	0.23
GSCR- 1604F- 331M	330.0	15.00	8	0.13	0.13

1.Inductance tested @100 KHz , 0.1 Vrms

2.Inductance drop = 10% typ. at rated Isat.

3.△T = 40^{0}C rise typ. at Irms.

4.Operating temperature range -40^{0}C~ +85%^{0}C

5.Electrical specifications at 25^{0}C

PART NO.	L(uH)+/-20%(1)	DCR (ohm) max	S.R.F ref (MHz)	I sat(2) (A)	I rms(3) (A)
GSCR- 1704F- 1R2M	1.2	0.08	190	2.10	3.60
GSCR- 1704F- 1R5M	1.5	0.10	140	1.90	2.80
GSCR- 1704F- 2R2M	2.2	0.12	115	1.60	2.40
GSCR- 1704F- 3R3M	3.3	0.16	90	1.30	2.00
GSCR- 1704F- 4R7M	4.7	0.20	88	1.10	1.70
GSCR- 1704F- 6R8M	6.8	0.32	66	0.90	1.20
GSCR- 1704F- 100M	10.0	0.41	55	0.80	1.10
GSCR- 1704F- 150M	15.0	0.55	42	0.65	0.90
GSCR- 1704F- 220M	22.0	0.85	38	0.50	0.83
GSCR- 1704F- 330M	33.0	1.30	29	0.40	0.62
GSCR- 1704F- 470M	47.0	1.80	22	0.35	0.52
GSCR- 1704F- 680M	68.0	2.50	18	0.30	0.35
GSCR- 1704F- 101M	100.0	3.50	14	0.25	0.27
GSCR- 1704F- 151M	150.0	5.00	12	0.18	0.24
GSCR- 1704F- 221M	220.0	7.00	10	0.16	0.23
GSCR- 1704F- 331M	330.0	15.00	8	0.13	0.13

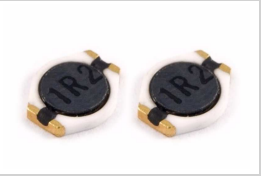
1.Inductance tested @100 KHz , 0.1 Vrms

2.Inductance drop = 10% typ. at rated Isat.

3.△T = 40^{0}C rise typ. at Irms.

4.Operating temperature range -40^{0}C~ +85%^{0}C

5.Electrical specifications at 25^{0}C



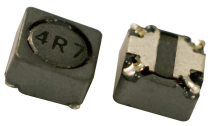
Product Series Code	**GSCR**	Brand	GOTREND
File Version	GSCR-V2R1	Editor	Robert
Established Date	2000.09.28	Description	LowProfile Ceramic RI Choke
Latest Edit Date	2013.02.23		

PART NO.	L(uH)+/-20%(1)	DCR (ohm) max	S.R.F ref (MHz)	I sat(2) (A)	I rms(3) (A)
GSCR- 1606F- 1R0M	1.0	0.04	230	2.50	2.30
GSCR- 1606F- 1R5M	1.5	0.06	180	2.20	2.10
GSCR- 1606F- 2R2M	2.2	0.07	140	1.80	1.70
GSCR- 1606F- 3R3M	3.3	0.10	110	1.40	1.30
GSCR- 1606F- 4R7M	4.7	0.15	100	1.20	1.10
GSCR- 1606F- 6R8M	6.8	0.19	80	1.10	1.00
GSCR- 1606F- 100M	10.0	0.30	60	1.00	0.90
GSCR- 1606F- 150M	15.0	0.40	45	0.80	0.70
GSCR- 1606F- 220M	22.0	0.54	35	0.60	0.50
GSCR- 1606F- 330M	33.0	0.74	30	0.50	0.45
GSCR- 1606F- 470M	47.0	1.10	22	0.45	0.40
GSCR- 1606F- 680M	68.0	1.60	20	0.35	0.35
GSCR- 1606F- 101M	100.0	2.30	15	0.30	0.30
GSCR- 1606F- 151M	150.0	3.20	10	0.25	0.25
GSCR- 1606F- 221M	220.0	5.70	9	0.20	0.18
GSCR- 1606F- 331M	330.0	8.20	8	0.16	0.16
GSCR- 1606F- 471M	470.0	10.80	7	0.14	0.12
GSCR- 1606F- 681M	680.0	17.20	5	0.12	0.10
GSCR- 1606F- 102M	1000.0	22.60	4	0.08	0.08

1.Inductance tested @100 KHz , 0.1 Vrms
2.Inductance drop = 10% typ. at rated Isat.
3.△T = 40^{0}C rise typ. at Irms.
4.Operating temperature range -40^{0}C ~ +85%^{0}C
5.Electrical specifications at 25^{0}C

PART NO.	L(uH)+/-20%(1)	DCR (ohm) max	S.R.F ref (MHz)	I sat(2) (A)	I rms(3) (A)
GSCR- 2506F- 4R7M	4.7	0.145	90.0	1.60	1.90
GSCR- 2506F- 5R0M	5.0	0.145	90.0	1.60	1.90
GSCR- 2506F- 6R8M	6.8	0.165	75.0	1.30	1.90
GSCR- 2506F- 100M	10.0	0.240	60.0	1.00	1.70
GSCR- 2506F- 150M	15.0	0.300	45.0	0.90	1.50
GSCR- 2506F- 220M	22.0	0.420	35.0	0.70	1.30
GSCR- 2506F- 330M	33.0	0.550	30.0	0.60	1.00
GSCR- 2506F- 470M	47.0	0.765	22.0	0.50	0.90
GSCR- 2506F- 680M	68.0	1.100	20.0	0.40	0.60
GSCR- 2506F- 101M	100.0	1.600	15.0	0.30	0.50
GSCR- 2506F- 151M	150.0	2.500	12.0	0.25	0.40
GSCR- 2506F- 221M	220.0	3.650	10.0	0.22	0.32
GSCR- 2506F- 331M	330.0	4.650	8.0	0.18	0.28
GSCR- 2506F- 471M	470.0	6.750	6.5	0.14	0.24
GSCR- 2506F- 681M	680.0	9.150	5.5	0.12	0.20
GSCR- 2506F- 102M	1000.0	14.200	4.5	0.10	0.16

1.Inductance tested @100 KHz , 0.1 Vrms
2.Inductance drop = 10% typ. at rated Isat.
3.△T = 40^{0}C rise typ. at Irms.
4.Operating temperature range -40^{0}C ~ +85%^{0}C
5.Electrical specifications at 25^{0}C



Product Series Code:	**GSDH**	Brand:	GOTREND
File Version:	GSDH-V1R3	Editor:	Teddy
Established Date:	2012.04.09	Description:	SMD Shielded Power Inductor
Latest Edit Date:	2013.02.23		

* Features & Application :

1. Power supply PWM circuit input / output inductor
2. Power line noise suppression
3. DC-DC Converter
4. Shielding Structure for good in EMI effect
5. To help you go pass CE / FCC standard
6. TFT / WiFi / MobilePhone / MP3 / PDA....etc. Application
7. Low Profile for all compact design

* Product Identify :

Pin Foot	EMI	Color	Made In
SMD	shield	Black	China / Taiwan

RoHS Compliant – SGS Test Report

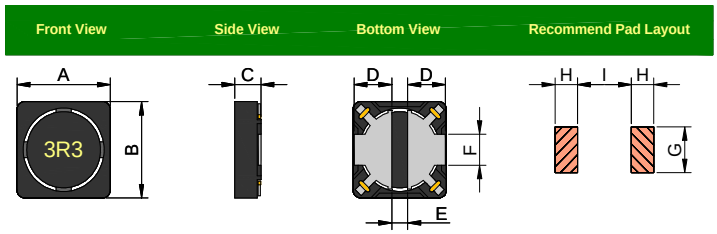
Pb	Cd	Hg	Cr+6	PBB	PBDE
<1000ppm	ND	ND	ND	ND	ND

* Part No. Example :

PN	GSDH	52	P	-	3R3	M
ID	1	2	3		4	5

1	GOTREND Series Code
2	Dimension Code : 52 = (L) 5.2 x (W) 5.2 x (H) 2.0 mm
3	RoHS Compliance
4	Inductance : 3R3 = 3.3uH
5	Tolerance : M = 20% ; N = 30%

* Dimensions : [mm]

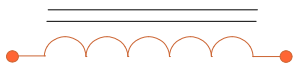


Type	Size Code	A (Max)	B (Max)	C (Max)	D (Ref.)	E (Ref.)	F (Ref.)	G (Ref.)	H (Ref.)	I (Ref.)
GSDH	52	5.20	5.20	2.00	1.80	1.20	1.60	2.00	2.00	1.20
GSDH	53	5.20	5.20	3.00	1.80	1.20	1.60	2.00	2.00	1.20
GSDH	74	7.30	7.30	4.50	2.75	1.20	2.40	2.80	3.00	1.20

* Operating & Storage Condition :

1.Storage Condition	-40 ~ +105 ° C / RH 65 ± 10%
2.Storage Life Time	6 Months @ 20 ° C / RH 65% (no seal off)
3.Operating Condition	-40 ~ +105 ° C (Including self-temperature rise)

* Schematic :



Attention & Caution :

* Keep out of splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condense
* Please be careful for the stress to this product by board flexure or something after the mounting.

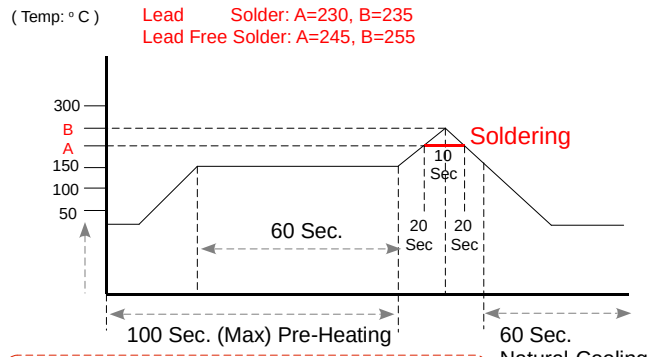
* Test Condition :

Equipment	1. L – WK3260 LCR Meter 2. RDC – Twintex TM8089A 3. IDC – WK3260+3265B DC-Bias 4. Dimension - Mitutoyo 5. Temperature – TECPEL 305A
Ambient	Temperature 20 ± 5 ° C Humidity RH 65 ± 20%

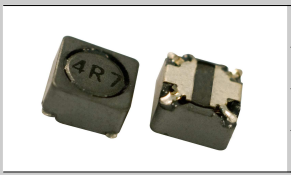
If there may be any doubt on the test result, Measurement shall be made within the following limits:

Ambient	Temperature 25 ± 5 ° C Humidity RH 75 ± 10%

* Recommend IR Reflow Curve : GTX-IR-FILE001



Notice: Iron Soldering, Solder < 30 Watt, Direct touch the terminal x 3 Sec. Max. @260 ° C



Product Series Code:	**GSDH**	Brand:	GOTREND
File Version:	GSDH-V1R3	Editor:	Teddy
Established Date:	2012.04.09	Description:	SMD Shielded Power Inductor
Latest Edit Date:	2013.02.23		

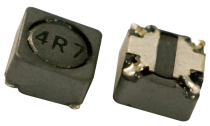
* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Max.
GSDH52P-1R2 □	1.2	M / N	28.0	33.6	4200	3200
GSDH52P-1R5 □	1.5	M / N	32.0	38.4	3500	2600
GSDH52P-2R2 □	2.2	M / N	45.0	54.0	3200	2400
GSDH52P-3R3 □	3.3	M / N	77.0	92.4	2600	1900
GSDH52P-4R7 □	4.7	M / N	100.0	120.0	2200	1700
GSDH52P-6R8 □	6.8	M / N	120.0	144.0	2000	1500
GSDH52P-100 □	10.0	M	184.0	220.8	1400	1100
GSDH52P-150 □	15.0	M	228.0	273.6	1100	1000
GSDH52P-220 □	22.0	M	331.0	397.2	900	900
GSDH52P-330 □	33.0	M	485.0	582.0	800	800
GSDH52P-470 □	47.0	M	730.0	876.0	600	600
GSDH52P-680 □	68.0	M	1030.0	1236.0	500	500
GSDH52P-101 □	100.0	M	1490.0	1788.0	430	400

- Inductance test Freq. : 100KHz / 0.1V
- L-Tolerance : M = 20% ; N = 30%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Max.
GSDH53P-1R2 □	1.2	M / N	27.0	32.4	4750	4800
GSDH53P-1R5 □	1.5	M / N	30.0	36.0	4200	4300
GSDH53P-2R2 □	2.2	M / N	44.0	52.8	3500	3600
GSDH53P-3R3 □	3.3	M / N	52.0	62.4	2800	2900
GSDH53P-4R7 □	4.7	M / N	65.0	78.0	2450	2500
GSDH53P-6R8 □	6.8	M / N	73.0	87.6	2000	2100
GSDH53P-100 □	10.0	M	89.0	106.8	1700	1800
GSDH53P-150 □	15.0	M	132.0	158.4	1300	1400
GSDH53P-220 □	22.0	M	175.0	210.0	1100	1200
GSDH53P-330 □	33.0	M	274.0	328.8	900	1000
GSDH53P-470 □	47.0	M	403.0	483.6	750	850
GSDH53P-680 □	68.0	M	510.0	612.0	600	700
GSDH53P-101 □	100.0	M	735.0	882.0	500	600

- Inductance test Freq. : 100KHz / 0.1V
- L-Tolerance : M = 20% ; N = 30%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

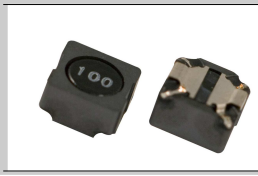


Product Series Code:	**GSDH**	Brand:	GOTREND
File Version:	GSDH-V1R3	Editor:	Teddy
Established Date:	2012.04.09	Description:	SMD Shielded Power Inductor
Latest Edit Date:	2013.02.23		

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Max.
GSDH74P-1R2 ☐	1.2	M / N	14.0	16.8	5000	4200
GSDH74P-3R3 ☐	3.3	M / N	24.0	28.8	4500	3200
GSDH74P-4R7 ☐	4.7	M / N	30.0	36.0	4000	3000
GSDH74P-6R8 ☐	6.8	N	36.0	43.2	3000	2800
GSDH74P-100 ☐	10.0	M	49.0	58.8	2800	2500
GSDH74P-150 ☐	15.0	M	72.0	86.4	2400	2000
GSDH74P-220 ☐	22.0	M	91.0	109.2	2000	1800
GSDH74P-330 ☐	33.0	M	132.0	158.4	1600	1500
GSDH74P-470 ☐	47.0	M	180.0	216.0	1300	1200
GSDH74P-680 ☐	68.0	M	260.0	312.0	1100	1000
GSDH74P-101 ☐	100.0	M	366.0	439.2	950	900
GSDH74P-151 ☐	150.0	M	540.0	648.0	750	700
GSDH74P-221 ☐	220.0	M	792.0	950.4	650	580
GSDH74P-331 ☐	330.0	M	1160.0	1392.0	500	460
GSDH74P-471 ☐	470.0	M	1660.0	1992.0	430	360
GSDH74P-681 ☐	680.0	M	2680.0	3216.0	350	280
GSDH74P-102 ☐	1000.0	M	3880.0	4656.0	250	200

- Inductance test Freq. : 100KHz / 0.1V
- L-Tolerance : M = 20% ; N = 30%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)



Product Series Code:	**GSDK**	Brand:	GOTREND
File Version:	GSDK-V1R1	Editor:	Teddy
Established Date:	2012.08.22	Description:	SMD Shielded Power Inductor
Latest Edit Date:	2013.02.23		

* Features & Application :

1. Power supply PWM circuit input / output inductor
2. Power line noise suppression
3. DC-DC Converter
4. Shielding Structure for good in EMI effect
5. To help you go pass CE / FCC standard
6. TFT / WiFi / MobilePhone / MP3 / PDA … etc. Application
7. Low Profile for all compact design

* Product Identify :

Pin Foot	EMI	Color	Made In
SMD	shield	Black	China / Taiwan

RoHS Compliant – SGS Test Report

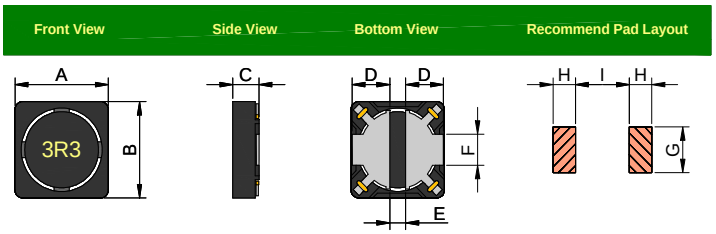
Pb	Cd	Hg	Cr+6	PBB	PBDE
<1000ppm	ND	ND	ND	ND	ND

* Part No. Example :

PN	GSDK	52	P	-	3R3	M
ID	1	2	3		4	5

1	GOTREND Series Code
2	Dimension Code : 52 = (L) 5.2 x (W) 5.2 x (H) 2.0 mm
3	RoHS Compliance
4	Inductance : 3R3 = 3.3uH
5	Tolerance : M = 20% ; N = 30%

* Dimensions : [mm]

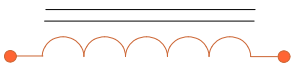


Type	Size Code	A (Max)	B (Max)	C (Max)	D (Ref.)	E (Ref.)	F (Ref.)	G (Ref.)	H (Ref.)	I (Ref.)
GSDK	52	5.2	5.2	2.0	1.8	1.2	1.6	2.0	2.0	1.2
GSDK	53	5.2	5.2	3.0	1.8	1.2	1.6	2.0	2.0	1.2

* Operating & Storage Condition :

1. Storage Condition	-40 ~ +105 °C / RH 65 ± 10%
2. Storage Life Time	6 Months @ 20 °C / RH 65% (no seal off)
3. Operating Condition	-40 ~ +105 °C (Including self-temperature rise)

* Schematic :



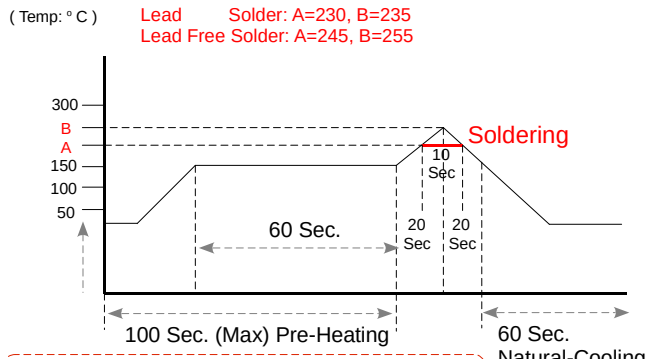
Attention & Caution :

* Keep out of splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condense
* Please be careful for the stress to this product by board flexure or something after the mounting.

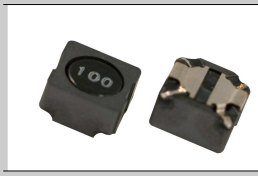
* Test Condition :

Equipment	1. L – WK3260 LCR Meter 2. RDC – Twintex TM8089A 3. IDC – WK3260+3265B DC-Bias 4. Dimension - Mitutoyo 5. Temperature – TECPEL 305A
Ambient	Temperature 20 ± 5 ° C Humidity RH 65 ± 20%
	If there may be any doubt on the test result, Measurement shall be made within the following limits:
Ambient	Temperature 25 ± 5 ° C Humidity RH 75 ± 10%

* Recommend IR Reflow Curve : GTX-IR-FILE001



Notice: Iron Soldering, Solder < 30 Watt, Direct touch the terminal x 3 Sec. Max. @260 °C



Product Series Code:	**GSDK**	Brand:	GOTREND
File Version:	GSDK-V1R1	Editor:	Teddy
Established Date:	2012.08.22	Description:	SMD Shielded Power Inductor
Latest Edit Date:	2013.02.23		

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Max.
GSDK52P-1R2M	1.2	M / N	28.0	33.6	6000	3200
GSDK52P-1R5M	1.5	M / N	32.0	38.4	5800	2600
GSDK52P-2R2M	2.2	M / N	45.0	54.0	4500	2400
GSDK52P-3R3M	3.3	M / N	77.0	92.4	3500	1900
GSDK52P-4R7M	4.7	M / N	100.0	120.0	3300	1700
GSDK52P-6R8M	6.8	M / N	120.0	144.0	2550	1500
GSDK52P-100M	10.0	M	184.0	220.8	2300	1100
GSDK52P-150M	15.0	M	228.0	273.6	1800	1000
GSDK52P-220M	22.0	M	331.0	397.2	1500	900
GSDK52P-330M	33.0	M	485.0	582.0	1300	800
GSDK52P-470M	47.0	M	730.0	876.0	1050	600
GSDK52P-680M	68.0	M	1030.0	1236.0	850	500
GSDK52P-101M	100.0	M	1490.0	1788.0	700	400

- Inductance test Freq. : 100KHz / 0.1V
- L-Tolerance : M = 20% ; N = 30%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Max.
GSDK53P-1R2M	1.2	M / N	20.0	24.0	7800	5500
GSDK53P-1R5M	1.5	M / N	26.0	31.2	7000	4600
GSDK53P-2R2M	2.2	M / N	30.0	36.0	6000	4300
GSDK53P-3R3M	3.3	M / N	42.0	50.4	4800	3200
GSDK53P-4R7M	4.7	M / N	58.0	69.6	4000	2600
GSDK53P-6R8M	6.8	M / N	73.0	87.6	3300	2100
GSDK53P-100M	10.0	M	89.0	106.8	2800	1800
GSDK53P-150M	15.0	M	132.0	158.4	2200	1400
GSDK53P-220M	22.0	M	175.0	210.0	1900	1200
GSDK53P-330M	33.0	M	274.0	328.8	1500	1000
GSDK53P-470M	47.0	M	403.0	483.6	1250	850
GSDK53P-680M	68.0	M	510.0	612.0	1100	700
GSDK53P-101M	100.0	M	735.0	882.0	900	600

- Inductance test Freq. : 100KHz / 0.1V
- L-Tolerance : M = 20% ; N = 30%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

Product Series Code	**GSSR**	Brand	GOTREND
File Version	GSSR-V3R6	Editor	Teddy
Established Date	2009.07.14	Description	SMD POWER CHOKE CORE WITH SHIELDING
Latest Edit Date	2013.02.23		

Features & Application:

* Shielding good in EMI
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* Mobils Device / Handheld Device / LowProfile Device / Panel...

Product Structure

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚PBDE
<1000ppm	ND	ND	ND	ND	ND

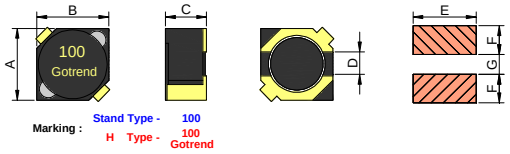
Part No Example:

GSSR 53 P [ ] - 100 N
1 2 3 4 5 6

1. GOTREND Type : GSSR
2. Dimension Code 5.7x5.7x3.0
3. P = Pb free<1000ppm
4. H : H Type = High storage & operating Condition
5. [L] Value : Inductance 100 = 10 uH
6. Tolerance : N = 30% , M = 20%

DIMENSION : [mm]

Front View | Side View | Bottom View | Recommend Pad Layout



TYPE	A+/-0.3	B+/-0.3	C [max.]	D+/-0.8	E [ref.]	F [ref.]	G [ref.]
GSSR32	3.70	3.70	1.80	2.00	4.10	1.25	1.60
GSSR42	4.70	4.70	2.00	2.00	5.10	1.75	1.60
GSSR425	4.70	4.70	2.50	2.00	5.10	1.75	1.60
GSSR43	4.70	4.70	3.00	2.00	5.10	1.75	1.60
GSSR52	5.70	5.70	2.00	2.00	6.30	2.35	1.60
GSSR53	5.70	5.70	3.00	2.00	6.30	2.35	1.60
GSSR62	6.70	6.70	2.00	2.00	7.30	2.85	1.60
GSSR63	6.70	6.70	3.00	2.00	7.30	2.85	1.60
GSSR64	6.70	6.70	4.10	2.00	7.30	2.85	1.60

Custom Design Spec : @

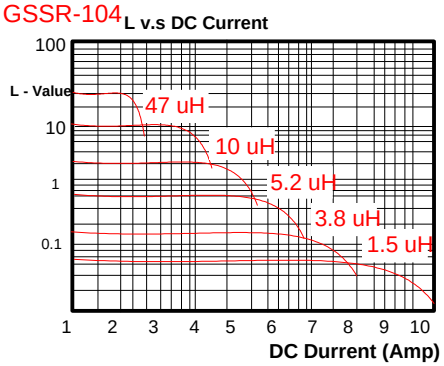
P/N	Inductance	RDC (max)	IDC

Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp : 20+/-15°C
Relative Humidity : 65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp : 25+/-5°C
Relative Humidity : 75+/-10%

GSSR-104 L v.s DC Current



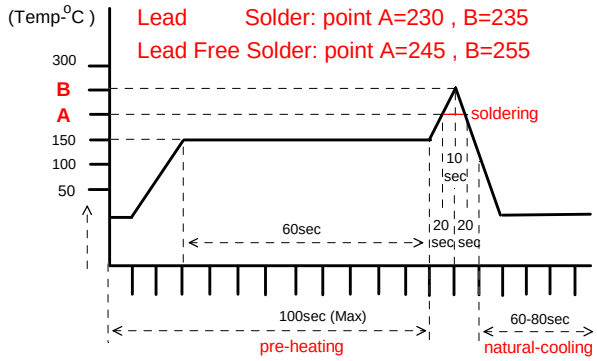
Operating & Storage Condition:

OPERATING TEMP : Stand Type : -40~+85°C
H Type : -40 ~ +165°C
(range is application specific)

STORAGE TEMP : Stand Type : -40~+85°C
H Type : -40 ~ +165°C
(range is application specific)

STORAGE LIFE TIME : 12 MONTH @25°C , RH 65%

Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering, Solder < 30 Watt, Direct touch the terminal x 3 Seconds Max. @350°C

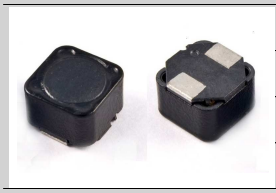
Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Product Series Code	**GSSR**	Brand	GOTREND
File Version	GSSR-V3R6	Editor	Teddy
Established Date	2009.07.14	Description	SMD POWER CHOKE CORE WITH SHIELDING
Latest Edit Date	2013.02.23		

L CODE	L (uH)	D.C.R (Ω)(max) / I.D.C(Amp)(max)																	
		GSSR 32		GSSR 42		GSSR 425		GSSR 43		GSSR 52		GSSR 53		GSSR 62		GSSR 63		GSSR 64	
1R0 ☐	1.0	0.045	1.60	0.045	1.72	0.038	3.20									0.016	4.10		
1R2 ☐	1.2							0.024	2.56									0.014	3.20
1R5 ☐	1.5	0.05	1.55			0.045	2.70									0.018	3.50		
1R8 ☐	1.8					0.050	2.30	0.028	2.20										
2R2 ☐	2.2	0.07	1.20	0.075	1.32	0.053	2.10	0.031	2.04	0.034	2.60	0.018	2.60	0.043	2.60	0.021	3.00		
2R5 ☐	2.5											0.018	2.60						
2R7 ☐	2.7			0.105	1.28	0.056	2.00	0.043	1.60										
3R0 ☐	3.0											0.024	2.40			0.024	3.00		
3R3 ☐	3.3	0.08	1.10	0.110	1.04	0.063	1.80	0.049	1.57	0.047	2.07	0.030	2.20	0.056	2.40	0.026	2.70	0.020	3.50
3R8 ☐	3.8																		
3R9 ☐	3.9			0.155	0.88	0.071	1.60	0.065	1.44							0.027	2.60	0.023	3.10
4R1 ☐	4.1									0.057	1.95								
4R2 ☐	4.2																		
4R7 ☐	4.7	0.11	0.90	0.162	0.84	0.077	1.50	0.072	1.32	0.060	1.90	0.036	2.10	0.073	2.10	0.032	2.50	0.024	3.00
5R0 ☐	5.0															0.033	2.40	0.025	2.90
5R2 ☐	5.2																		
5R3 ☐	5.3																		
5R4 ☐	5.4									0.076	1.60								
5R6 ☐	5.6			0.170	0.80	0.083	1.40	0.101	1.17			0.040	1.90						
6R0 ☐	6.0															0.035	2.25		
6R2 ☐	6.2									0.096	1.40	0.045	1.80					0.027	2.50
6R8 ☐	6.8	0.17	0.73	0.200	0.76	0.094	1.10	0.109	1.12	0.096	1.30			0.099	1.80	0.040	2.10		
7R0 ☐	7.0																		
7R3 ☐	7.3															0.054	2.10		
7R4 ☐	7.4																	0.031	2.30
8R2 ☐	8.2			0.245	0.68	0.105	1.00	0.118	1.04			0.053	1.60						
8R6 ☐	8.6															0.058	1.85		
8R7 ☐	8.7																	0.034	2.20
8R9 ☐	8.9									0.116	1.25								
100 ☐	10.0	0.21	0.55	0.200	0.61	0.112	0.95	0.128	1.00	0.124	1.20	0.065	1.30	0.156	1.50	0.065	1.70	0.038	2.00
120 ☐	12.0			0.210	0.56	0.162	0.80	0.132	0.84	0.153	1.10	0.076	1.20			0.070	1.55	0.053	1.70
150 ☐	15.0	0.29	0.45	0.240	0.50	0.176	0.80	0.149	0.76	0.196	0.97	0.103	1.10	0.244	1.20	0.084	1.40	0.057	1.60
180 ☐	18.0			0.338	0.48	0.192	0.72	0.166	0.72	0.210	0.85	0.110	1.00			0.095	1.32	0.092	1.50
220 ☐	22.0	0.43	0.40	0.397	0.41	0.224	0.70	0.235	0.70	0.290	0.80	0.122	0.90	0.388	0.95	0.128	1.20	0.096	1.30
270 ☐	27.0			0.441	0.35	0.261	0.60	0.261	0.58	0.330	0.75	0.175	0.85			0.142	1.05	0.109	1.20
330 ☐	33.0	0.68	0.32	0.694	0.32	0.372	0.58	0.378	0.56	0.386	0.65	0.189	0.75	0.531	0.82	0.165	0.97	0.124	1.10
390 ☐	39.0			0.709	0.30	0.394	0.52	0.384	0.50	0.520	0.57	0.212	0.70			0.210	0.86	0.138	1.00
470 ☐	47.0	1.00	0.26	0.922	0.28	0.457	0.47	0.587	0.48	0.595	0.54	0.250	0.62	0.775	0.65	0.238	0.80	0.155	0.95
560 ☐	56.0			1.080	0.26	0.514	0.45	0.624	0.41	0.665	0.50	0.305	0.58			0.277	0.73	0.202	0.85
680 ☐	68.0			1.300	0.24	0.686	0.40	0.699	0.35	0.840	0.43	0.355	0.52			0.304	0.65	0.234	0.75
820 ☐	82.0			1.550	0.22	0.802	0.35	0.915	0.32	0.978	0.41	0.463	0.46			0.390	0.60	0.324	0.70
101 ☐	100.0	1.75	0.15	1.730	0.20	1.162	0.32	1.020	0.29	1.200	0.36	0.520	0.42			0.535	0.54	0.358	0.65
121 ☐	120.0			2.390	0.18	1.298	0.30	1.270	0.27	1.500	0.33	0.560	0.40			0.750	0.51	0.470	0.59
151 ☐	150.0			2.670	0.15	1.423	0.27	1.350	0.24	1.710	0.31	0.680	0.35			0.950	0.47	0.580	0.54
181 ☐	180.0			4.000	0.14			1.540	0.22	2.240	0.28	0.930	0.32			1.200	0.41	0.690	0.49
221 ☐	220.0							1.720	0.20	2.440	0.23	1.150	0.30			1.500	0.37	0.890	0.43
271 ☐	270.0							1.950	0.16	3.380	0.21	1.560	0.27			1.700	0.33	1.290	0.40
331 ☐	330.0							2.660	0.14	4.340	0.18	1.980	0.25			2.150	0.28	1.700	0.37
391 ☐	390.0							2.830	0.13			2.500	0.22			2.250	0.27	1.750	0.34
471 ☐	470.0					5.000	0.15					2.700	0.20			3.150	0.21	2.200	0.32
561 ☐	660.0											3.120	0.18			3.750	0.20	2.850	0.29
681 ☐	680.0											4.150	0.16			5.150	0.20	3.200	0.25
821 ☐	820.0																	4.050	0.22
102 ☐	1000.0															5.600	0.14	5.700	0.20

* Measuring Freq.(L) : GSSR-32/42/43/62 @100KHz / 0.1V. ,GSSR-52/53/63/64 @10KHz / 0.1V. ,GSSR-104 @100KHz / 1V.
* Test Instrument : HP4286A * Tolerance Code : M=± 20% , N=± 30%
* IDC : Base on L drop 35% max. & Temp. rise up 40 deg.C max.



Product Series Code	**GSDRH**	Brand	GOTREND
File Version	GSDRH-V4R7	Editor	Teddy
Established Date	2009.08.27	Description	Shielding Choke
Latest Edit Date	2013.02.23		

Features & Application :

* Good in EMI and fit for large current application
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* MB / NB / IPC / LCD Monitor / STB / Hub / Switch...letc.

Product Structure :

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example:

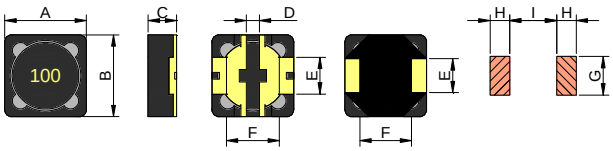
GSDRH 127 P T - 102 M
1 2 3 4 5 6

1.GOTREND Type : GSDRH
2.Dimension Code : 12 x 12 x 8 mm
3.P = Pb free < 1000 ppm
4.T = Iron Base Pad
5.L Value : 102 = 1000uH
6.Tolerance : M = 20% , N = 30%

DIMENSION : [mm]

Base replaceable without notice !

Front View | Side View | Bottom View (Iron Base / Plastic Base) | Recommend Pad Layout



TYPE	A+/-0.5	B+/-0.5	C [max.]	D [ref.]	E+/-0.5	F+/-0.2	G [ref.]	H [ref.]	I [ref.]
GSDRH62	6.30	6.30	3.00	1.00	1.50	4.60	1.90	1.25	4.20
GSDRH64	6.30	6.30	5.00	1.00	1.50	4.60	1.90	1.25	4.20
GSDRH124	12.00	12.00	4.50	1.50	5.00	7.60	5.60	2.80	7.00
GSDRH125	12.00	12.00	6.00	1.50	5.00	7.60	5.60	2.80	7.00
GSDRH127	12.00	12.00	8.00	1.50	5.00	7.60	5.60	2.80	7.00
GSDRH129	12.00	12.00	9.00	1.50	5.00	7.60	5.60	2.80	7.00

Test Equipment :

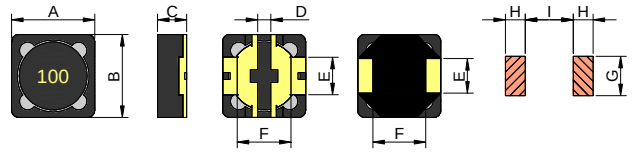
* HP4284A , HP42841A - L , IDC , Q , RDC
* HP8753D NETWORK ANALYZER - SRF

Standard Atmospheric Conditions :
Ambient Temp : 20 +/- 15°C
Relative Humidity : 65 +/- 20%
If there may be any doubt on the result,
measurement shall be made within the following limits :
Ambient Temp : 25 +/- 5°C
Relative Humidity : 75 +/- 10%

DIMENSION : [mm]

Base replaceable without notice !

Front View | Side View | Bottom View (Iron Base / Plastic Base) | Recommend Pad Layout



TYPE	A+/-0.5	B+/-0.5	C [max.]	D [ref.]	E+/-0.5	F+/-0.2	G [ref.]	H [ref.]	I [ref.]
GSDRH73	7.30	7.30	3.50	1.30	1.98	4.80	2.40	1.65	4.40
GSDRH74	7.30	7.30	4.50	1.98	1.98	4.80	2.40	1.65	4.40

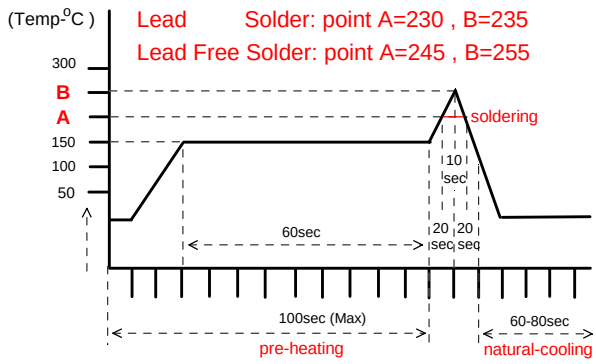
Operatiing & Storage Condition :

OPERATING TEMP : -40 ~ +85°C
STORAGE TEMP : -40 ~ +85°C
STORAGE LIFE TIME : 12 MONTH @25°C , RH 65%

Attention & Caution :

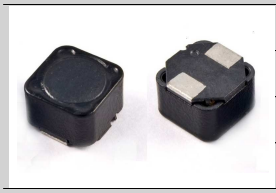
Please avoid following matters :
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exced the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260° C

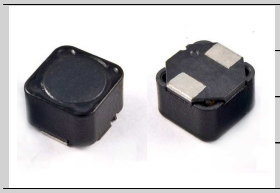
GOTREND Technology Co., Ltd.
http://www.gotrend.com.tw



Product Series Code	**GSDRH**	Brand	GOTREND
File Version	GSDRH-V4R7	Editor	Teddy
Established Date	2009.08.27	Description	Shielding Choke
Latest Edit Date	2013.02.23		

L CODE	Inductance (uH)	D.C.R(ohm) (max)				Permissible D.C. Current (Amp) (max)			
		GSDRH 62	GSDRH 64	GSDRH 73	GSDRH 74	GSDRH 62	GSDRH 64	GSDRH 73	GSDRH 74
1R2	1.2								
1R5	1.5			18m				3.40	
1R8	1.8				18m				5.50
2R2	2.2			23m	24m			3.2	4.00
2R4	2.4								
2R7	2.7				24m				3.00
3R3	3.3	68m	30m	34m	30m	1.94	2.20	3.50	4.00
3R5	3.5								
3R9	3.9								
4R7	4.7	80m	40m		44m	1.63	1.80		2.70
5R5	5.5	96m				1.40			
6R1	6.1								
6R8	6.8		0.09m		46m		1.8		2.40
7R6	7.6								
8R2	8.2				48m				2.00
100	10.0	0.15	0.12	72m	49m	1.10	1.35	1.68	1.84
120	12.0	0.20	0.13	98m	58m	1.00	1.20	1.52	1.71
150	15.0	0.23	0.18	0.13	81m	0.90	1.10	1.33	1.47
180	18.0	0.27	0.24	0.14	91m	0.80	1.00	1.20	1.31
220	22.0	0.34	0.27	0.19	0.11	0.74	0.91	1.07	1.23
270	27.0	0.38	0.30	0.21	0.15	0.66	0.82	0.96	1.12
330	33.0	0.45	0.33	0.24	0.17	0.59	0.75	0.91	0.96
390	39.0	0.49	0.37	0.32	0.23	0.54	0.69	0.77	0.91
470	47.0	0.69	0.52	0.36	0.26	0.50	0.62	0.76	0.88
560	56.0	0.78	0.56	0.47	0.35	0.46	0.58	0.68	0.75
680	68.0	1.07	0.63	0.52	0.38	0.42	0.52	0.61	0.69
820	82.0	1.21	0.71	0.69	0.43	0.38	0.47	0.57	0.61
101	100.0	1.39	1.03	0.79	0.61	0.34	0.43	0.50	0.60
121	120.0	1.90	1.15	0.89	0.66	0.31	0.39	0.49	0.52
151	150.0	2.18	1.68	1.27	0.88	0.28	0.35	0.43	0.46
181	180.0	2.77	1.87	1.45	0.98	0.26	0.32	0.39	0.42
221	220.0	3.12	2.08	1.65	1.17	0.23	0.29	0.35	0.36
271	270.0	4.38	2.37	2.31	1.64	0.22	0.26	0.32	0.34
331	330.0	4.94	2.67	2.62	1.86	0.19	0.23	0.28	0.32
391	390.0		2.94	2.94	2.85		0.22	0.26	0.29
471	470.0		3.93	4.18	3.01		0.20	0.24	0.26
561	560.0		5.43	4.67	3.62		0.18	0.22	0.23
681	680.0		7.32	5.73	4.63		0.17	0.19	0.22
821	820.0		8.24	6.54	5.20		0.15	0.18	0.20
102	1000.0		9.26	9.44	6.00		0.14	0.16	0.18

* Measuring Freq.(L) : 1.0~8.2 uH (100KHz / 0.3V) , 10~820uH (1kHz / 0.3V).
* L Value Tolerance : GSDRH-62 / 64 / 73 / 74 = +/- 20%
* D.C.Current : Base on L drop 25% max. & Temp. rise up 40 deg.C max.



Product Series Code	**GSDRH**	Brand	GOTREND
File Version	GSDRH-V4R7	Editor	Teddy
Established Date	2009.08.27	Description	Shielding Choke
Latest Edit Date	2013.02.23		

L CODE	Inductance (uH)	D.C.R(ohm) (max)				Permissible D.C. Current (Amp) (max)			
		GSDRH 124	GSDRH 125	GSDRH 127	GSDRH 129	GSDRH 124	GSDRH 125	GSDRH 127	GSDRH 129
1R0	1.0		10m		5.0m		9		16.00
1R5	1.5			7.0m	5.0m			9.80	15.10
2R2	2.2			11.5m	6.0m			8.00	13.20
2R4	2.4	14.0m		11.5m		4.90		8.00	
3R3	3.3	15.0m	18.0m	13.5m	7.0m	6.5	7.50	7.50	11.90
3R5	3.5			13.5m				7.50	
3R9	3.9	15.0m				6.50			
4R7	4.7	18.0m	20.0m	15.8m	8.0m	5.70	7.40	6.80	10.80
5R6	5.6				10.0m				9.60
6R1	6.1			17.6m				6.60	
6R8	6.8	23.0m	25.0m	19.0m	12.0m	4.90	4.5	6.60	8.70
7R6	7.6			20.0m				5.90	
8R2	8.2	26.0m		20.0m		4.60		5.60	
100	10.0	28.0m	25.0m	21.6m	17.0m	4.50	4.00	5.40	8.00
120	12.0	38.0m	27.0m	24.3m		4.00	3.50	4.90	
150	15.0	50.0m	30.0m	27.0m	28.0m	3.20	3.30	4.50	7.00
180	18.0	57.0m	34.0m	39.2m		3.10	3.00	3.90	
220	22.0	66.0m	36.0m	43.2m	32.0m	2.90	2.80	3.60	5.60
270	27.0	80.0m	51.0m	45.9m		2.80	2.30	3.40	
330	33.0	97.0m	57.0m	64.8m	51.0m	2.70	2.10	3.00	4.80
390	39.0	0.132	68.0m	72.9m		2.10	2.00	2.75	
470	47.0	0.160	75.0m	0.100	78.0m	1.90	1.80	2.50	3.90
560	56.0	0.190	0.110	0.110		1.80	1.70	2.35	
680	68.0	0.220	0.120	0.140	0.105	1.50	1.50	2.10	2.70
820	82.0	0.260	0.140	0.160		1.30	1.40	1.95	
101	100.0	0.308	0.160	0.220	0.150	1.20	1.30	1.70	2.10
121	120.0	0.380	0.170	0.250		1.10	1.10	1.60	
151	150.0	0.530	0.230	0.280		0.95	1.00	1.42	
181	180.0	0.620	0.290	0.350		0.85	0.90	1.30	
221	220.0	0.700	0.400	0.390		0.80	0.80	1.16	
271	270.0	0.870	0.460	0.560		0.60	0.75	1.06	
331	330.0	0.990	0.510	0.640		0.50	0.68	0.95	
391	390.0		0.690	0.700			0.65	0.88	
471	470.0		0.770	0.980			0.58	0.79	
561	560.0		0.860	1.070			0.54	0.73	
681	680.0		1.200	1.460			0.48	0.67	
821	820.0		1.340	1.640			0.43	0.60	
102	1000.0		1.530	1.820			0.40	0.55	
552	5500.0				6.45				0.45

* Measuring Freq.(L) : 1.0~8.2 uH (100KHz / 0.3V) , 10~820uH (1kHz / 0.3V).
* L Value Tolerance : # GSDRH124 /125 / 127 / 129 = +/- 20%
  # GSDRH129-1R0 / 4R7 = +/- 30%
* D.C.Current : Base on L drop 25% max. & Temp. rise up 40 deg.C max.

Product Series Code:	**GSDRK**	Brand:	GOTREND
File Version:	GSDRK-V2R9	Editor:	Teddy
Established Date:	2009.09.01	Description:	Shielding SMD power choke
Latest Edit Date:	2013.02.23		

* Features & Application:

1.Power supply PWM circuit input / output inductor
2.Power line noise suppression
3.DC-DC Converter
4.Shielding Structure for good in EMI effect
5.To help you go pass CE/FCC standard
6.MB / NB / IPC / LCD Monitor / STB / Network Device
7.Low Profile for all compact design

* Product Identify:

Pin Foot	EMI	Color	Made In
SMD	Shield	Black	China / Taiwan

RoHS Compliant – SGS Test Report

Pb	Cd	Hg	Cr+6	PBB	PBDE
<1000ppm	ND	ND	ND	ND	ND

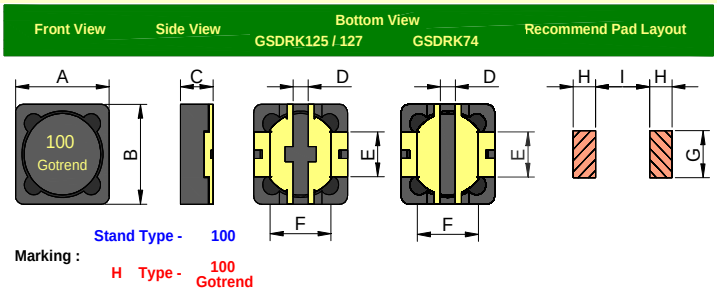
* Part No. Example:

PN	GSDRK	127	P	[ ]	- 100	M	[ ]
ID	1	2	3	4	5	6	7

1 GOTREND Series Code
2 Dimension Code: 127 = (L) 12.5 x (W) 12.5 x (H) 8.0 mm
3 RoHS Compliant
4 Special Code for Series — L : Low Profile; H : H Type = High Storage & Operating Condition
5 Inductance : 100 = 10.0uH Ex: 3R3=3.3uH, 101=100uH
6 Tolerance : M=20%, N=30%
7 Special Code for specific item : S=Custom Design

* Dimensions: [mm]

Base replaceable without notice!



Size Code	A (Max)	B (Max)	C (Max)	D (Ref.)	E (+/-0.3)	F (+/-0.5)	G (Ref.)	H (Ref.)	I (Ref.)
74	7.80	7.80	4.50	1.30	1.98	4.80	2.40	1.65	4.40
125	12.50	12.50	6.00	1.50	5.00	7.60	5.60	2.80	7.00
127	12.50	12.50	8.00	1.50	5.00	7.60	5.60	2.80	7.00

* Operating & Storage Condition:

1.Storage Condition — Stand Type : -40 ~ + 85 ° C / RH 65 ± 10%; H Type : -40 ~ +165 ° C / RH 65 ± 10%; (range is application specific)

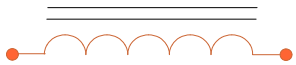
2.Storage Life Time — 6 Months @ 20 ° C / RH 65% (no seal off)

3.Operating Condition — Stand Type : -40 ~ +105 ° C; H Type : -40 ~ +165 ° C; (range is application specific)

Attention & Caution:

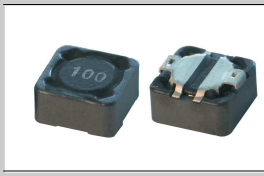
* Keep out of splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condense
* Please be careful for the stress to this product by board flexure or something after the mounting.

* Schematic:



* Test Condition:

* Recommend IR Reflow Curve: GTX-IR-FILE001



Product Series Code:	**GSDRK**	Brand:	GOTREND
File Version:	GSDRK-V2R9	Editor:	Teddy
Established Date:	2009.09.01	Description:	Shielding SMD power choke
Latest Edit Date:	2013.02.23		

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm / typ.)	RDC (m Ohm / max.)	Isat 1 @ L-Drop 10% (Amp / max.)	Isat 2 @ L-Drop 35% (Amp / max.)	Irms @△T=40 ℃ (Amp / max.)
GSDRK74P-1R0□	1.0	M / N	10.9	13.2	9.50	10.50	8.40
GSDRK74P-1R5□	1.5	M / N	12.5	15.0	7.90	9.50	7.80
GSDRK74P-1R8□	1.8	M / N	14.1	17.0	7.70	8.60	7.30
GSDRK74P-2R2□	2.2	M / N	16.1	19.0	6.80	7.50	6.60
GSDRK74P-2R7□	2.7	M / N	18.9	23.0	6.30	7.00	6.20
GSDRK74P-3R3□	3.3	M / N	22.2	27.0	6.00	6.50	5.80
GSDRK74P-3R9□	3.9	M / N	25.2	30.0	5.40	6.00	5.40
GSDRK74P-4R7□	4.7	M / N	27.7	34.0	5.00	5.50	5.20
GSDRK74P-5R6□	5.6	M / N	34.8	42.0	4.10	5.00	4.80
GSDRK74P-6R8□	6.8	M / N	40.0	48.0	3.80	4.50	4.50
GSDRK74P-8R2□	8.2	M / N	48.0	58.0	3.60	4.10	4.30
GSDRK74P-100□	10.0	M	55.6	67.0	2.55	3.50	4.00
GSDRK74P-120□	12.0	M	63.2	76.0	2.50	3.40	3.80
GSDRK74P-150□	15.0	M	79.0	95.0	2.40	3.30	3.50
GSDRK74P-180□	18.0	M	97.4	117.0	2.10	2.90	3.20
GSDRK74P-220□	22.0	M	114.0	136.0	2.00	2.60	3.00
GSDRK74P-270□	27.0	M	123.0	147.0	1.90	2.40	2.80
GSDRK74P-330□	33.0	M	152.0	182.0	1.65	2.10	2.40
GSDRK74P-390□	39.0	M	164.0	196.0	1.55	2.00	2.20
GSDRK74P-470□	47.0	M	200.0	240.0	1.50	1.82	2.00
GSDRK74P-560□	56.0	M	250.0	300.0	1.35	1.60	1.78
GSDRK74P-680□	68.0	M	290.0	350.0	1.25	1.50	1.65
GSDRK74P-820□	82.0	M	390.0	470.0	1.10	1.30	1.50
GSDRK74P-101□	100.0	M	490.0	590.0	1.00	1.18	1.30
GSDRK74P-121□	120.0	M	600.0	720.0	0.90	1.10	1.15
GSDRK74P-151□	150.0	M	770.0	920.0	0.75	0.90	1.00
GSDRK74P-181□	180.0	M	860.0	1030.0	0.74	0.86	0.95
GSDRK74P-221□	220.0	M	1050.0	1250.0	0.70	0.77	0.85
GSDRK74P-271□	270.0	M	1300.0	1560.0	0.63	0.70	0.78
GSDRK74P-331□	330.0	M	1620.0	1940.0	0.59	0.65	0.72
GSDRK74P-391□	390.0	M	2100.0	2500.0	0.50	0.59	0.65
GSDRK74P-471□	470.0	M	2340.0	2800.0	0.45	0.54	0.60
GSDRK74P-561□	560.0	M	3000.0	3600.0	0.42	0.50	0.56
GSDRK74P-681□	680.0	M	3350.0	4020.0	0.40	0.44	0.48
GSDRK74P-821□	820.0	M	3800.0	4560.0	0.35	0.40	0.44
GSDRK74P-102□	1000.0	M	5044.0	6050.0	0.28	0.35	0.38
GSDRK74P-103□	10000.0	M	/	6380	/	/	0.10
GSDRK74P-202□	20000.0	M	/	102000	/	/	0.30
GSDRK74P-152□	15000.0	M	/	68000	/	/	0.30

■ L Tolerance : M = +/-20% ； N = +/-30% ■ L value test frequency : 1.0~8.2uH @ 100KHz / 0.3V ； 10~1000uH @ 1KHz / 0.3V

■ The Isat1 is the current at which the inductance decreases by 10% from the initial value

■ The Isat2 is the current at which the inductance decreases by 35% from the initial value

■ The Irms is the current at which the temperature rise is △40,whichever20℃).

Product Series Code:	**GSDRK**	Brand:	GOTREND
File Version:	GSDRK-V2R9	Editor:	Teddy
Established Date:	2009.09.01	Description:	Shielding SMD power choke
Latest Edit Date:	2013.02.23		

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm / typ.)	RDC (m Ohm / max.)	Isat 1 @ L-Drop 10% (Amp / max.)	Isat 2 @ L-Drop 35% (Amp / max.)	Irms @△T=40℃ (Amp / max.)
GSDRK125P-2R7□	2.7	N	5.00	8.00	13.00	14.00	9.00
GSDRK125P-3R3□	3.3	M / N	9.70	15.00	12.20	13.20	8.20
GSDRK125P-3R9□	3.9	M / N	10.70	16.00	11.00	12.20	7.80
GSDRK125P-4R7□	4.7	M / N	11.40	17.00	10.50	11.30	7.50
GSDRK125P-5R6□	5.6	M / N	14.00	18.00	9.40	10.00	6.70
GSDRK125P-6R8□	6.8	M / N	15.30	20.00	8.50	9.30	6.40
GSDRK125P-8R2□	8.2	M / N	16.60	22.00	7.50	8.40	6.10
GSDRK125P-100□	10.0	M	18.60	24.00	7.00	8.00	5.75
GSDRK125P-120□	12.0	M	21.80	28.00	6.60	7.50	5.30
GSDRK125P-150□	15.0	M	24.00	30.00	6.00	6.60	5.00
GSDRK125P-180□	18.0	M	29.40	37.00	5.40	6.00	4.70
GSDRK125P-220□	22.0	M	33.50	42.00	4.80	5.50	4.40
GSDRK125P-270□	27.0	M	40.50	51.00	4.50	5.00	4.00
GSDRK125P-330□	33.0	M	50.30	63.00	4.00	4.50	3.63
GSDRK125P-390□	39.0	M	62.00	78.00	3.50	4.00	3.20
GSDRK125P-470□	47.0	M	69.00	87.00	3.30	3.60	3.00
GSDRK125P-560□	56.0	M	83.00	104.00	3.00	3.30	2.70
GSDRK125P-680□	68.0	M	98.00	125.00	2.75	3.00	2.50
GSDRK125P-820□	82.0	M	116.00	145.00	2.40	2.70	2.20
GSDRK125P-101□	100.0	M	143.00	180.00	2.30	2.55	1.90
GSDRK125P-121□	120.0	M	166.00	210.00	2.00	2.30	1.70
GSDRK125P-151□	150.0	M	211.00	270.00	1.85	2.05	1.50
GSDRK125P-181□	180.0	M	246.00	310.00	1.65	1.85	1.35
GSDRK125P-221□	220.0	M	293.00	370.00	1.50	1.75	1.25
GSDRK125P-271□	270.0	M	380.00	470.00	1.38	1.58	1.10
GSDRK125P-331□	330.0	M	460.00	580.00	1.25	1.40	1.00
GSDRK125P-391□	390.0	M	550.00	680.00	1.15	1.30	0.92
GSDRK125P-471□	470.0	M	660.00	820.00	1.05	1.20	0.83
GSDRK125P-561□	560.0	M	770.00	960.00	0.98	1.08	0.76
GSDRK125P-681□	680.0	M	950.00	1200.00	0.88	0.98	0.69
GSDRK125P-821□	820.0	M	1120.00	1400.00	0.78	0.88	0.64
GSDRK125P-102□	1000.0	M	1550.00	1940.00	0.68	0.78	0.56

- L Tolerance : M = +/-20% ; N = +/-30%
- L value test frequency : 1.0~8.2uH @ 100KHz / 0.3V ; 10~1000uH @ 1KHz / 0.3V
- The Isat1 is the current at which the inductance decreases by 10% from the initial value
- The Isat2 is the current at which the inductance decreases by 35% from the initial value
- The Irms by Stand-Type is the current at which the temperature rise is △T ≤ 40℃ ,whichever (Ta＝20℃).
- The Irms by H-Type is the current for an approximate △T of 40℃ without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed 165℃ under worst case operating conditions verified in the end application.

Product Series Code:	**GSDRK**	Brand:	GOTREND
File Version:	GSDRK-V2R9	Editor:	Teddy
Established Date:	2009.09.01	Description:	Shielding SMD power choke
Latest Edit Date:	2013.02.23		

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm / typ.)	RDC (m Ohm / max.)	Isat 1 @ L-Drop 10% (Amp / max.)	Isat 2 @ L-Drop 35% (Amp / max.)	Irms @△T=40 ℃ (Amp / max.)
GSDRK127P-1R0□	1.0	N	4.50	5.85	20.00	21.00	11.00
GSDRK127P-2R2□	2.2	M / N	6.50	8.45	19.00	20.00	10.00
GSDRK127P-3R3□	3.3	M / N	7.59	10.00	18.00	19.00	9.60
GSDRK127P-4R7□	4.7	M / N	9.75	13.00	14.50	16.60	8.20
GSDRK127P-5R6□	5.6	M / N	12.50	15.50	13.50	15.00	7.60
GSDRK127P-6R8□	6.8	M / N	13.40	16.80	12.70	13.50	7.35
GSDRK127P-8R2□	8.2	M / N	15.40	19.00	11.30	12.50	6.50
GSDRK127P-100□	10.0	M	18.70	23.50	10.00	11.50	6.10
GSDRK127P-120□	12.0	M	19.60	25.00	9.50	10.50	5.50
GSDRK127P-150□	15.0	M	27.50	34.00	8.60	9.50	5.00
GSDRK127P-180□	18.0	M	29.70	38.00	7.80	8.60	4.80
GSDRK127P-220□	22.0	M	36.60	45.80	7.00	7.70	4.60
GSDRK127P-270□	27.0	M	41.90	52.50	6.35	7.00	4.20
GSDRK127P-330□	33.0	M	51.60	62.00	5.45	6.30	3.80
GSDRK127P-390□	39.0	M	59.70	72.00	5.30	6.00	3.50
GSDRK127P-470□	47.0	M	72.00	87.00	5.00	5.50	3.10
GSDRK127P-560□	56.0	M	90.00	110.00	4.50	5.00	2.90
GSDRK127P-680□	68.0	M	108.00	130.00	4.00	4.30	2.70
GSDRK127P-820□	82.0	M	123.00	148.00	3.60	4.00	2.50
GSDRK127P-850□	85.0	K	137.00	165.00	3.30	3.60	/
GSDRK127P-101□	100.0	M	152.00	182.00	3.20	3.50	2.20
GSDRK127P-121□	120.0	M	170.00	204.00	3.10	3.40	2.00
GSDRK127P-151□	150.0	M	226.00	270.00	2.90	3.20	1.80
GSDRK127P-181□	180.0	M	283.00	340.00	2.50	2.80	1.60
GSDRK127P-221□	220.0	M	348.00	420.00	2.25	2.50	1.45
GSDRK127P-271□	270.0	M	397.00	480.00	2.00	2.30	1.30
GSDRK127P-331□	330.0	M	500.00	600.00	1.90	2.00	1.20
GSDRK127P-391□	390.0	M	560.00	670.00	1.70	1.90	1.10
GSDRK127P-471□	470.0	M	657.00	800.00	1.55	1.70	1.00
GSDRK127P-561□	560.0	M	820.00	1000.00	1.45	1.60	0.90
GSDRK127P-681□	680.0	M	990.00	1200.00	1.30	1.45	0.80
GSDRK127P-821□	820.0	M	1260.00	1500.00	1.20	1.30	0.70
GSDRK127P-102□	1000.0	M	1530.00	1820.00	1.09	1.20	0.60
GSDRK127P-222□	2200.0	K / M	3050.00	3660.00	0.70	0.80	0.42
GSDRK127P-332□	3300.0	K / M	4250.00	5100.00	0.45	0.55	0.35
GSDRK127P-682□	6800.0	M	9130.00	10950.00	0.30	0.30	0.24

- L Tolerance : K = +/-10% ； M = +/-20% ； N = +/-30%
- L value test frequency : 1.0~8.2uH @ 100KHz / 0.3V ； 10~1000uH @ 1KHz / 0.3V
- The Isat1 is the current at which the inductance decreases by 10% from the initial value
- The Isat2 is the current at which the inductance decreases by 35% from the initial value
- The Irms by Stand-Type is the current at which the temperature rise is △T ≤ 40℃ ,whichever (Ta＝20℃).
- The Irms by H-Type is the current for an approximate △T of 40℃ without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed 165℃ under worst case operating conditions verified in the end application.

Product Series Code	**GSDRS**	Brand	GOTREND
File Version	GSDRS-V2R2	Editor	Robert
Established Date	2000.09.28	Description	SMD CHOKE CORE WITH SHIELDING
Latest Edit Date	2013.02.23		

Features & Application:

* Shielding Drum Choke for good in EMI
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* Mobile Device / Handheld Device / LCD / IPC...etc

Product Structure

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

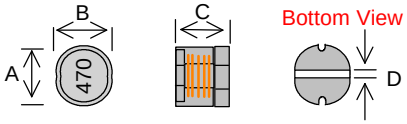
Part No Example:

GSDRS - 63 -P- 470 - K

1 2 3 4 5

1.GOTREND Type : GSDRS
2. Dimension Code: 6X6X 3 mm
3. P=RoHS Rule Pb<1000ppm
4.[L] Value : Inductance
1R0=1.0uH; 470=47uH
5. Tolerance: K=10%,, M=20%

Dimensions: [mm] MECHANICAL ASSEMBLY:



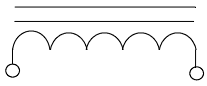
Type	A (max)	B (max)	C (max)	D(Ref.)
GSDRS-63	6.5	5.9	3.5	1.5
GSDRS-74	8.1	7.4	4.9	2.1
GSDRS-105	10.4	9.4	5.5	2.9

Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15ºC
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5ºC
Relative Humidity:75+/-10%

SCHEMATIC:



Operating & Storage Condition:

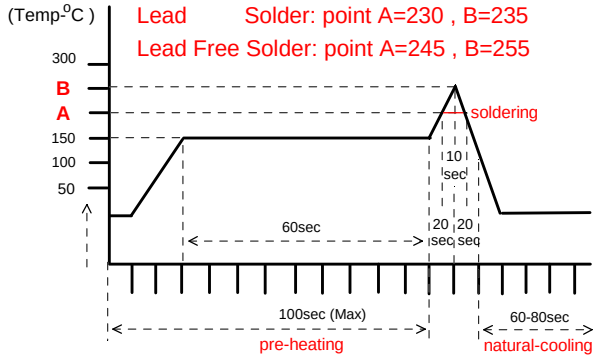
OPERATING TEMP:-40~+85ºC

STORAGE TEMP:-40~+85ºC
STORAGE LIFE TIME: 12 MONTH @25ºC , RH 65%

Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260° C

Product Series Code	**GSDRS**	Brand	GOTREND
File Version	GSDRS-V2R2	Editor	Robert
Established Date	2000.09.28	Description	SMD CHOKE CORE WITH SHIELDING
Latest Edit Date	2013.02.23		

L CODE	L (uH)	Measuring Freq.	DCR (Ω) (max) / Rated D. C. Current(Amp)					
			GSDRS 63		GSDRS 74		GSDRS 105	
4R7	4.7	1.00KHz			0.03	2.80		
100	10.0	1.00KHz	0.14	1.00	0.07	1.65	0.06	2.06
120	12.0	1.00KHz	0.16	0.94	0.07	1.57	0.07	1.94
150	15.0	1.00KHz	0.18	0.86	0.08	1.39	0.07	1.72
180	18.0	1.00KHz	0.25	0.78	0.10	1.29	0.08	1.58
220	22.0	1.00KHz	0.32	0.76	0.13	1.12	0.08	1.42
270	27.0	1.00KHz	0.36	0.64	0.16	1.06	0.10	1.32
330	33.0	1.00KHz	0.41	0.61	0.18	0.97	0.11	1.16
390	39.0	1.00KHz	0.47	0.53	0.18	0.91	0.12	1.10
470	47.0	1.00KHz	0.51	0.50	0.27	0.80	0.14	1.00
560	56.0	1.00KHz	0.72	0.46	0.29	0.76	0.19	0.93
680	68.0	1.00KHz	0.82	0.42	0.33	0.68	0.21	0.85
820	82.0	1.00KHz			0.43	0.62	0.28	0.79
101	100.0	1.00KHz			0.49	0.55	0.34	0.72
121	120.0	1.00KHz			0.68	0.49	0.37	0.63
151	150.0	1.00KHz			0.94	0.44	0.51	0.55
181	180.0	1.00KHz			1.00	0.40	0.57	0.50
221	220.0	1.00KHz			1.18	0.36	0.78	0.47
271	270.0	1.00KHz			1.30	0.33	0.87	0.41
331	330.0	1.00KHz					1.20	0.37
391	390.0	1.00KHz					1.34	0.35
471	470.0	1.00KHz					1.50	0.33

Tolerance of Inductance:

GSDRS63 10uH~27uH +/- 20% (M), 33uH~68uH +/- 15% (L)
GSDRS74 10uH~27uH +/- 20% (M), 33uH~82uH +/- 15% (L), 100uH~270uH +/- 10% (K)
GSDRS105 10uH~27uH +/- 20% (M), 33uH~82uH +/- 15% (L), 100uH~470uH +/- 10% (K)

*Rated D.C. Current:
This indicates the value of current when the inducance is 10% lower than it' s initial value at D.C. superimposition or D.C. current when at t=40 ℃, whichever is lower. (Ta=20 ℃)

Product Series Code	**GSSR2**	Brand	GOTREND
File Version	GSSR2-V4R3	Editor	Teddy
Established Date	2009.08.27	Description	SMD Power Choke
Latest Edit Date	2013.02.23		

Features & Application:

* Shielding for good in EMI and LowProfile for large current
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* Mobil Device / Handheld Device / LowProfile Device / Panel...

Product Structure

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

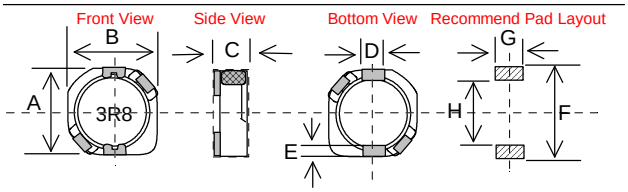
鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Expression Example:

GSSR2 - 104 - P - 3R8 - N

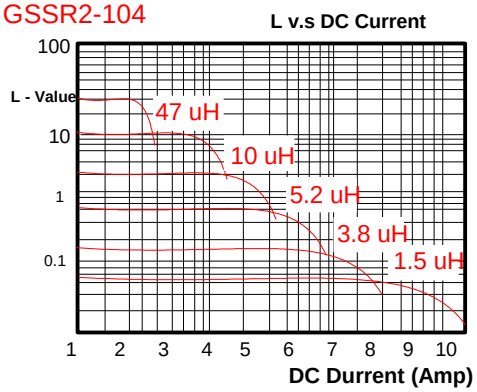
1. GOTREND Series : GSSR2
2. Dimension Code: 10x10x4 mm
3. P=Pb free<1000ppm
4. [L] Value: 3R8=3.8uH
5. Tolerance: M=20%,, N=30%

Dimensions:[mm] MECHANICAL ASSEMBL & MARKING

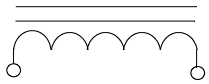


Type	A	B	C	D	E	F	G	H
104	10.2+/-0.5	10.0+/-0.5	3.8+/-0.2	3.0 typ.	1.25 typ.	10.7 ref.	3.8 ref.	7.3 ref.

GSSR2-104



SCHEMATIC:

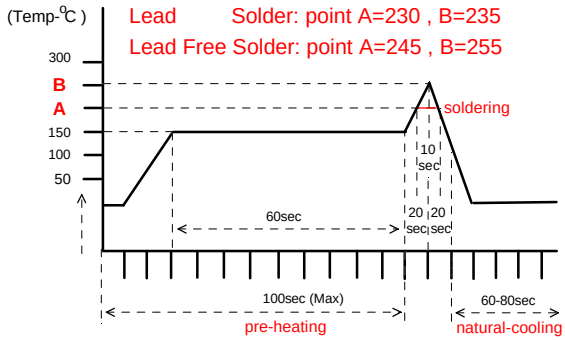


Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15°C
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:75+/-10%

Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260° C

Product Series Code	**GSSR2**	Brand	GOTREND
File Version	GSSR2-V4R3	Editor	Teddy
Established Date	2009.08.27	Description	SMD Power Choke
Latest Edit Date	2013.02.23		

Operatiing & Storage Condition:

OPERATING TEMP:-40~+85ºC

STORAGE TEMP:-40~+85ºC

STORAGE LIFE TIME: 12 MONTH @25ºC , RH 65%

Attention & Caution:

Please avoid following matters:

* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exced the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

PART NO.	Inductance (uH) at 100kHz, 1V	D.C.R (Ω)(Max) at 20 ℃	Rated Current (Amp)(Max)	
			Condition 1	Condition 2
GSSR2-104P-R33N	0.33	4.2m	12.00	8.50
GSSR2-104P-R68N	0.68	6.0m	11.00	7.50
GSSR2-104P-1R0N	1.00	10.0m	10.00	6.50
GSSR2-104P-1R3N	1.30	8.1m	10.00	6.50
GSSR2-104P-1R5N	1.50	8.1m	10.00	6.50
GSSR2-104P-1R8N	1.80	10.0m	9.20	6.10
GSSR2-104P-2R2N	2.20	10.0m	7.60	6.10
GSSR2-104P-2R5N	2.50	10.5m	7.50	6.10
GSSR2-104P-3R0N	3.00	12.0m	7.50	6.10
GSSR2-104P-3R3M/N	3.30	13.0m	7.50	6.10
GSSR2-104P-3R8N	3.80	13.0m	6.00	5.50
GSSR2-104P-4R7M/N	4.70	22.0m	5.70	5.60
GSSR2-104P-5R2N	5.20	22.0m	5.50	5.40
GSSR2-104P-5R6N	5.60	29.0m	5.30	5.00
GSSR2-104P-6R8N	6.80	27.0m	4.80	4.50
GSSR2-104P-7R0N	7.00	27.0m	4.80	4.50
GSSR2-104P-8R2N	8.20	34.0m	4.40	3.80
GSSR2-104P-100M/N	10.00	35.0m	4.40	3.80
GSSR2-104P-150N	15.00	50.0m	3.60	3.10
GSSR2-104P-180M/N	18.00	70.0m	3.20	2.60
GSSR2-104P-220M/N	22.00	73.0m	2.90	2.50
GSSR2-104P-270N	27.00	87.0m	2.40	2.30
GSSR2-104P-330M/N	33.00	93.0m	2.30	2.20
GSSR2-104P-470M/N	47.00	128.0m	2.10	1.90
GSSR2-104P-680M/N	68.00	213.0m	1.50	1.42
GSSR2-104P-820M/N	82.00	265.0m	1.40	1.32
GSSR2-104P-101M/N	100.00	304.0m	1.35	1.25
GSSR2-104P-151M/N	150.00	506.0m	1.15	0.85
GSSR2-104P-221M/N	220.00	756.0m	0.92	0.70
GSSR2-104P-331M/N	330.00	1.09	0.70	0.52
GSSR2-104P-821M/N	820.00	2.60	0.49	0.30

Measuring Freq.(L): at @100KHz / 1Volt
Test Instrument: HP4286A
L (inductance) TOLERANCE : GSSR2-104 Series 0.33~15 uH +/-30%
GSSR2-104 Series 18~330 uH +/-20% and +/-30%

Note:
The rated current indicates the current when the inductance decreases to 65% of initial value or DC current when the temperature of coil is increased by 30 ℃. The smaller one is defined as rated current.
Condition 1: The current when the inductance decreases to 65% of initial value.
Condition 2: The current when the temperature of coil is increased by 30 ℃.

Product Series Code	**GSBS**	Brand	GOTREND
File Version	GSBS-V3R7	Editor	Teddy
Established Date	2009.06.10	Description	SMD Drum Choke with Shielding
Latest Edit Date	2013.02.23		

Features & Application:

* Drum Choke with Shielding for good in EMI performance.
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* Mobile Device / Handheld Device / LowProfile Device / Panel...

Product Structure

SMD | DIP | Shield | Unshield

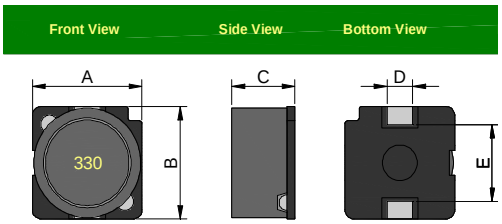
2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example:

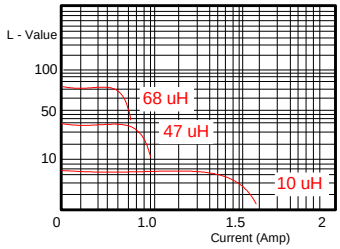
GSBS	73	P -	220	M
1	2	3	4	5

1. GOTREND Series : GSBS
2. Size Code LxWxH: 73=7.4x7.4x3.5 mm
3. P=Pb free < 1000ppm
4. [L] Value : 220=22uH
5. Tolerance, K=+/-10%, M=+/-20%

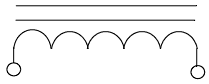


Type	A (max)	B (max)	C (max)	D (+/-0.2)	E (Ref.)
63	6.2	6.2	3.0	1.8	3.0
73	7.4	7.4	3.5	2.0	5.4
74	7.4	7.4	4.5	2.0	5.4
104	10.4	10.4	4.8	3.0	6.5
126	12.8	12.8	5.8	3.0	8.6
127	12.8	12.8	6.8	3.0	8.6
128	12.8	12.8	7.8	3.0	8.6

Ex:GSBS-73 L v.s Rated D.C Current Curve



SCHEMATIC:

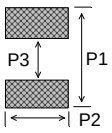


Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15°C
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:75+/-10%

Recommend Pad Layout:



Size	P1	P2	P3
63	6.60	2.4	2.6
73	7.80	2.6	5.0
74	7.80	2.6	5.0
104	10.80	3.6	6.1
126	13.20	3.6	8.2
127	13.20	3.6	8.2
128	13.20	3.6	8.2

Operating & Storage Condition:

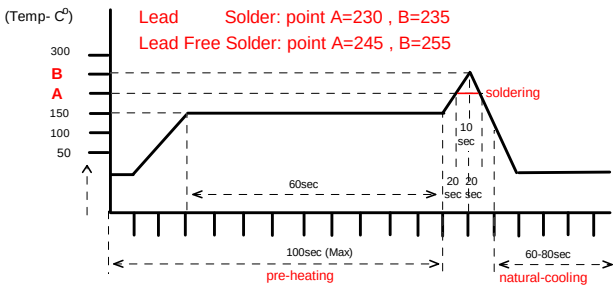
OPERATING TEMP:-40~+85°C
STORAGE TEMP:-40~+85°C
STORAGE LIFE TIME: 12 MONTH @25°C , RH 65%

Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Recommand Reflow Curve

(TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260 C

Product Series Code	**GSBS**	Brand	GOTREND
File Version	GSBS-V3R7	Editor	Teddy
Established Date	2009.06.10	Description	SMD Drum Choke with Shielding
Latest Edit Date	2013.02.23		

Part No.	L - Value (uH)	Test Freq. (KHz)0.25V	DCR (ohm) max	IDC (A) max
GSBS63P-2R2 ☐	2.2	100	0.027	2.50
GSBS63P-4R7☐	4.7	100	0.050	1.90
GSBS63P-100 ☐	10.0	1	0.150	1.10
GSBS63P-120 ☐	12.0	1	0.200	1.00
GSBS63P-150 ☐	15.0	1	0.230	0.90
GSBS63P-180 ☐	18.0	1	0.270	0.80
GSBS63P-220 ☐	22.0	1	0.340	0.74
GSBS63P-270 ☐	27.0	1	0.380	0.66
GSBS63P-330 ☐	33.0	1	0.450	0.59
GSBS63P-390 ☐	39.0	1	0.490	0.54
GSBS63P-470 ☐	47.0	1	0.690	0.50
GSBS63P-560 ☐	56.0	1	0.780	0.46
GSBS63P-680 ☐	68.0	1	1.070	0.42
GSBS63P-820 ☐	82.0	1	1.210	0.38
GSBS63P-101 ☐	100.0	1	1.390	0.34
GSBS63P-121 ☐	120.0	1	1.900	0.31
GSBS63P-151 ☐	150.0	1	2.180	0.28
GSBS63P-181 ☐	180.0	1	2.770	0.26
GSBS63P-221 ☐	220.0	1	3.120	0.23
GSBS63P-271 ☐	270.0	1	4.380	0.22
GSBS63P-331 ☐	330.0	1	4.940	0.19

Tolerance Code: K=± 10%,M=± 20%

Part No.	L - Value (uH)	Test Freq. (KHz)0.25V	DCR (ohm) max.	IDC (A) max
GSBS73P-1R0 ☐	1.0	100	0.019	3.12
GSBS73P-1R5 ☐	1.5	100	0.023	2.85
GSBS73P-2R2 ☐	2.2	100	0.028	2.66
GSBS73P-3R3 ☐	3.3	100	0.035	2.26
GSBS73P-4R7 ☐	4.7	100	0.043	1.96
GSBS73P-6R8 ☐	6.8	100	0.055	1.76
GSBS73P-100 ☐	10.0	1	0.080	1.34
GSBS73P-120 ☐	12.0	1	0.090	1.23
GSBS73P-150 ☐	15.0	1	0.120	1.09
GSBS73P-180 ☐	18.0	1	0.130	0.99
GSBS73P-220 ☐	22.0	1	0.150	0.90
GSBS73P-270 ☐	27.0	1	0.210	0.81
GSBS73P-330 ☐	33.0	1	0.250	0.72
GSBS73P-390 ☐	39.0	1	0.310	0.67
GSBS73P-470 ☐	47.0	1	0.350	0.60
GSBS73P-560 ☐	56.0	1	0.430	0.55
GSBS73P-680 ☐	68.0	1	0.520	0.50
GSBS73P-820 ☐	82.0	1	0.600	0.46
GSBS73P-101 ☐	100.0	1	0.790	0.41

Tolerance Code: K=± 10%,M=± 20%

Product Series Code	GSBS	Brand	GOTREND
File Version	GSBS-V3R7	Editor	Teddy
Established Date	2009.06.10	Description	SMD Drum Choke with Shielding
Latest Edit Date	2013.02.23		

Part No.	L - Value (uH)	Test Freq. (KHz)0.25V	DCR (ohm) max.	IDC (A) max
GSBS74P-1R0 ☐	1.0	100	0.023	2.880
GSBS74P-1R5 ☐	1.5	100	0.027	2.610
GSBS74P-2R2 ☐	2.2	100	0.030	2.460
GSBS74P-3R3 ☐	3.3	100	0.035	2.280
GSBS74P-4R7 ☐	4.7	100	0.041	2.080
GSBS74P-6R8 ☐	6.8	100	0.047	1.940
GSBS74P-100 ☐	10.0	1	0.050	1.680
GSBS74P-120 ☐	12.0	1	0.070	1.540
GSBS74P-150 ☐	15.0	1	0.080	1.390
GSBS74P-180 ☐	18.0	1	0.090	1.260
GSBS74P-220 ☐	22.0	1	0.110	1.130
GSBS74P-270 ☐	27.0	1	0.150	1.020
GSBS74P-330 ☐	33.0	1	0.170	0.840
GSBS74P-390 ☐	39.0	1	0.180	0.800
GSBS74P-470 ☐	47.0	1	0.200	0.760
GSBS74P-560 ☐	56.0	1	0.280	0.640
GSBS74P-680 ☐	68.0	1	0.320	0.600
GSBS74P-820 ☐	82.0	1	0.350	0.570
GSBS74P-101 ☐	100.0	1	0.400	0.500
GSBS74P-221 ☐	220.0	1	0.620	0.330
GSBS74P-331 ☐	330.0	1	0.940	0.270

Tolerance Code: K=± 10%,M=± 20%

Part No.	L - Value (uH)	Test Freq. (KHz)0.25V	DCR (ohm) +/-20%	IDC (A) max
GSBS104P-4R7 ☐	4.7	100	0.034	3.60
GSBS104P-6R8 ☐	6.8	100	0.035	3.50
GSBS104P-100 ☐	10.0	1	0.036	3.00
GSBS104P-150 ☐	15.0	1	0.047	2.40
GSBS104P-220 ☐	22.0	1	0.059	2.10
GSBS104P-330 ☐	33.0	1	0.082	1.60
GSBS104P-470 ☐	47.0	1	0.100	1.40
GSBS104P-680 ☐	68.0	1	0.140	1.20
GSBS104P-820 ☐	82.0	1	0.182	1.00
GSBS104P-101 ☐	100.0	1	0.200	1.00
GSBS104P-151 ☐	150.0	1	0.350	0.79
GSBS104P-221 ☐	220.0	1	0.470	0.65
GSBS104P-331 ☐	330.0	1	0.680	0.54
GSBS104P-471 ☐	470.0	1	1.030	0.47
GSBS104P-681 ☐	680.0	1	1.600	0.38
GSBS104P-102 ☐	1000.0	1	2.800	0.32
GSBS104P-152 ☐	1500.0	1	3.400	0.22

Tolerance Code: M=± 20%

Product Series Code	**GSBS**	Brand	GOTREND
File Version	GSBS-V3R7	Editor	Teddy
Established Date	2009.06.10	Description	SMD Drum Choke with Shielding
Latest Edit Date	2013.02.23		

Part No.	L - Value (uH)	Test Freq. (KHz),0.25V	DCR (ohm) +/-20%	IDC (A) max
GSBS126P-6R0 ☐	6.0	100	0.016	3.60
GSBS126P-100 ☐	10.0	1	0.022	3.40
GSBS126P-150 ☐	15.0	1	0.026	2.80
GSBS126P-220 ☐	22.0	1	0.034	2.30
GSBS126P-330 ☐	33.0	1	0.042	1.90
GSBS126P-470 ☐	47.0	1	0.062	1.60
GSBS126P-680 ☐	68.0	1	0.083	1.30
GSBS126P-101 ☐	100.0	1	0.117	1.10
GSBS126P-151 ☐	150.0	1	0.190	0.88
GSBS126P-221 ☐	220.0	1	0.270	0.72
GSBS126P-331 ☐	330.0	1	0.410	0.59
GSBS126P-471 ☐	470.0	1	0.520	0.49
GSBS126P-681 ☐	680.0	1	0.760	0.43
GSBS126P-102 ☐	1000.0	1	1.120	0.34
GSBS126P-152 ☐	1500.0	1	1.800	0.29

Tolerance Code: 6.0uH N=± 30%
10.0~1500uH M=± 20%

Part No.	L - Value (uH)	Test Freq. (KHz),0.25V	DCR (ohm) +/-20%	IDC (A) max
GSBS127P-2R0 ☐	2.0	100	0.012	10.0
GSBS127P-4R2 ☐	4.2	100	0.015	7.3
GSBS127P-7R0 ☐	7.0	100	0.018	5.7
GSBS127P-100 ☐	10.0	1	0.020	5.0
GSBS127P-150 ☐	15.0	1	0.024	4.2
GSBS127P-220 ☐	22.0	1	0.032	3.5
GSBS127P-330 ☐	33.0	1	0.041	2.8
GSBS127P-470 ☐	47.0	1	0.058	2.4
GSBS127P-680 ☐	68.0	1	0.079	2.0
GSBS127P-101 ☐	100.0	1	0.123	1.6
GSBS127P-221 ☐	220.0	1	0.273	1.0

Tolerance Code: 2~ 7uH N=± 30%
10~220uH M=± 20%

Part No.	L - Value (uH)	Test Freq. (KHz),0.25V	DCR (m ohm) +/-20%	IDC (A) max
GSBS128P-1R2 ☐	1.2	100	6.80	13.0
GSBS128P-2R7 ☐	2.7	100	9.40	10.0
GSBS128P-3R3 ☐	3.3	100	10.00	9.5
GSBS128P-3R9 ☐	3.9	100	10.40	9.0
GSBS128P-4R7 ☐	4.7	100	11.25	8.5
GSBS128P-5R6 ☐	5.6	100	11.60	7.8
GSBS128P-6R8 ☐	6.8	100	13.10	7.2
GSBS128P-100 ☐	10.0	1	15.90	5.5
GSBS128P-150 ☐	15.0	1	18.40	4.7
GSBS128P-220 ☐	22.0	1	26.30	4.0
GSBS128P-330 ☐	33.0	1	40.20	3.2
GSBS128P-470 ☐	47.0	1	52.80	2.7
GSBS128P-680 ☐	68.0	1	77.80	2.0
GSBS128P-101 ☐	100.0	1	125.00	1.9
GSBS128P-151 ☐	150.0	1	175.00	1.5
GSBS128P-221 ☐	220.0	1	258.00	1.3

Tolerance Code: 1.2~6.8uH =N± 30%
10~220uH =M± 20%

Product Series Code:	**GSBSM**	Brand:	GOTREND
File Version:	GSBSM-V1R1	Editor:	Teddy
Established Date:	2011.12.27	Description:	Shielding SMD power choke
Latest Edit Date:	2013.02.23		

* Features & Application :

1.Power supply PWM circuit input / output inductor
2.Power line noise suppression
3.DC-DC Converter
4.Shielding Structure for good in EMI effect
5.To help you go pass CE/FCC standard
6.MB / NB / IPC / LCD Monitor / STB / Network Device
7.Low Profile for all compact design

* Product Identify :

Pin Foot	EMI	Color	Made In
SMD	Shield	Black	China / Taiwan

RoHS Compliant – SGS Test Report

Pb	Cd	Hg	Cr+6	PBB	PBDE
<1000ppm	ND	ND	ND	ND	ND

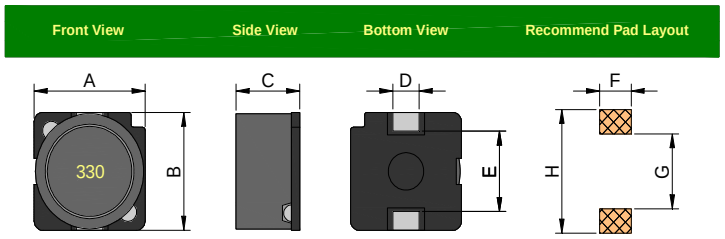
* Part No. Example :

PN	GSBSM	126	P	- 330	M
ID	1	2	3	4	5

1 GOTREND Series Code
2 Dimension Code : 126 = (L) 12.8 x (W) 12.8 x (H) 5.8 mm
3 RoHS Compliant
4 Inductance : 330 = 33.0uH
5 Tolerance : M = 20%

* Dimensions : [mm]

Base replaceable without notice!



Size Code	A (Max.)	B (Max.)	C (Max.)	D (+/-0.2)	E (Ref.)	F (Ref.)	G (Ref.)	H (Ref.)
126	12.8	12.8	5.8	3.0	8.6	3.6	8.0	13.2
128	12.8	12.8	7.8	3.0	8.6	3.6	8.0	13.2

* Operating & Storage Condition :

1.Storage Condition -40 ~ +85 ° C / RH 65 ± 10%

2.Storage Life Time 6 Months @ 20 ° C / RH 65% (no seal off)

3.Operating Condition -40 ~ +105 ° C

* Schematic :

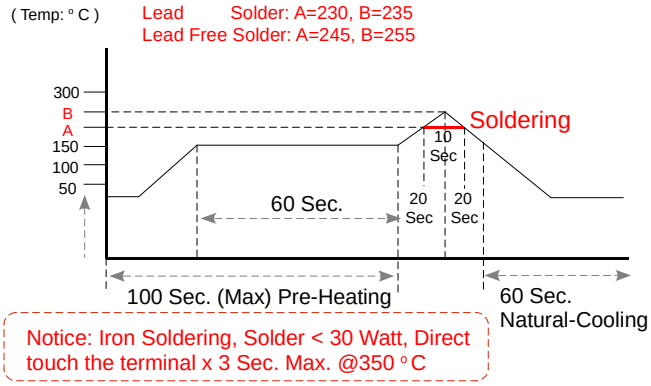
Attention & Caution:

* Keep out of splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condense
* Please be careful for the stress to this product by board flexure or something after the mounting.

* Test Condition :

Equipment	1.L – WK3260 LCR Meter 2.RDC – Twintex TM8089A 3.IDC – WK3260+3265B DC-Bias 4.Dimension - Mitutoyo 5.Temperature – TECPEL 305A
Ambient	Temperature 20 ± 5 ° C Humidity RH 65 ± 20%
	If there may be any doubt on the test result, Measurement shall be made within the following limits:
Ambient	Temperature 25 ± 5 ° C Humidity RH 75 ± 10%

* Recommend IR Reflow Curve : GTX-IR-FILE001



Notice: Iron Soldering, Solder < 30 Watt, Direct touch the terminal x 3 Sec. Max. @350 ° C

Product Series Code:	**GSBSM**	Brand:	GOTREND
File Version:	GSBSM-V1R1	Editor:	Teddy
Established Date:	2011.12.27	Description:	Shielding SMD power choke
Latest Edit Date:	2013.02.23		

* Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance M = ± 20% N = ± 30%	RDC (m Ohm / typ.)	RDC (m Ohm / max.)	Isat 1 @ L-Drop 10% (Amp / max.)	Isat 2 @ L-Drop 35% (Amp / max.)	Irms @△T=40 ℃ (Amp / max.)
GSBSM126P-1R5□	1.5	N	5.0	6.5	8.00	11.00	7.60
GSBSM126P-2R2□	2.2	N	6.0	7.8	7.00	9.00	7.20
GSBSM126P-3R3□	3.3	N	7.0	9.1	6.50	8.00	6.80
GSBSM126P-4R7□	4.7	M	8.0	10.4	4.50	6.50	6.40
GSBSM126P-5R6□	5.6	M	9.2	12.0	4.00	5.50	6.00
GSBSM126P-8R2□	8.2	M	12.0	15.6	3.50	5.00	5.50
GSBSM126P-100□	10.0	M	15.0	19.5	3.40	4.00	5.00
GSBSM126P-150□	15.0	M	24.0	31.0	3.00	3.60	4.50
GSBSM126P-220□	22.0	M	30.0	39.0	2.30	3.00	4.00
GSBSM126P-330□	33.0	M	43.0	51.0	2.20	2.60	3.50
GSBSM126P-470□	47.0	M	52.0	67.6	1.60	1.80	3.00
GSBSM126P-680□	68.0	M	75.0	97.5	1.30	1.75	2.40
GSBSM126P-101□	100.0	M	110.0	143.0	1.10	1.40	1.90
GSBSM126P-151□	150.0	M	160.0	208.0	0.88	1.20	1.50
GSBSM126P-221□	220.0	M	210.0	273.0	0.72	1.00	1.25
GSBSM126P-331□	330.0	M	330.0	429.0	0.59	0.80	1.00
GSBSM126P-471□	470.0	M	450.0	585.0	0.49	0.65	0.80
GSBSM126P-681□	680.0	M	640.0	832.0	0.43	0.55	0.65
GSBSM126P-102□	1000.0	M	1000.0	1300.0	0.34	0.45	0.50
GSBSM126P-152□	1500.0	M	1600.0	2080.0	0.29	0.35	0.35

■ L value test frequency : @ 1KHz / 0.3V
■ The Isat1 is the current at which the inductance decreases by 10% from the initial value
■ The Isat2 is the current at which the inductance decreases by 35% from the initial value
■ The Irms is the current at which the temperature rise is △T ≤ 40℃ ,whichever (Ta＝20℃).

Product Series Code:	**GSBSM**	Brand:	GOTREND
File Version:	GSBSM-V1R1	Editor:	Teddy
Established Date:	2011.12.27	Description:	Shielding SMD power choke
Latest Edit Date:	2013.02.23		

GOTREND PN	Inductance (uH)	L-Tolerance M = ± 20%	RDC (m Ohm / typ.)	RDC (m Ohm / max.)	Isat 1 @ L-Drop 10% (Amp / max.)	Isat 2 @ L-Drop 35% (Amp / max.)	Irms @△T=40 ℃ (Amp / max.)
GSBSM128P-1R5□	1.5	N	5.0	6.5	13.50	15.00	10.00
GSBSM128P-2R2□	2.2	N	7.0	9.1	10.50	12.00	8.50
GSBSM128P-3R3□	3.3	N	8.0	10.4	9.50	10.00	8.00
GSBSM128P-4R7□	4.7	M	10.0	13.0	8.50	9.50	7.30
GSBSM128P-6R8□	6.8	M	11.0	14.3	6.80	8.50	7.00
GSBSM128P-100□	10.0	M	14.0	18.2	6.50	7.80	6.50
GSBSM128P-120□	12.0	M	16.5	20.0	5.20	6.40	6.00
GSBSM128P-150□	15.0	M	17.8	22.0	5.00	6.00	5.50
GSBSM128P-220□	22.0	M	25.0	32.5	4.50	5.50	5.00
GSBSM128P-330□	33.0	M	40.0	48.0	4.20	5.00	4.50
GSBSM128P-470□	47.0	M	44.0	57.2	3.00	3.70	4.20
GSBSM128P-560□	56.0	M	55.0	71.5	2.60	3.30	3.70
GSBSM128P-680□	68.0	M	60.0	78.0	2.40	3.00	3.50
GSBSM128P-820□	82.0	M	82.0	106.6	2.30	2.80	3.00
GSBSM128P-101□	100.0	M	92.0	120.0	2.00	2.40	2.50

- L value test frequency : @ 1KHz / 0.3V
- The Isat1 is the current at which the inductance decreases by 10% from the initial value
- The Isat2 is the current at which the inductance decreases by 35% from the initial value
- The Irms is the current at which the temperature rise is △T ≤ 40℃ ,whichever (Ta＝20℃).

Product Series Code:	**GXRD**	Brand:	GOTREND
File Version:	GXRD-V1R1	Editor:	Teddy
Established Date:	2010.02.09	Description:	SMD Shielded Power Inductor
Latest Edit Date:	13/2/23		

* Features & Application:

1.Power supply PWM circuit input / output inductor
2.Power line noise suppression
3.DC-DC Converter
4.Shielding Structure for good in EMI effect
5.To help you go pass CE/FCC standard
6.TFT/ WiFi/ MobilePhone/ MP3/ PDA....etc. Application
7.Low Profile for all compact design

* Product Identify:

Pin Foot	EMI	Color	Made In
SMD	shield	Black	China / Taiwan

RoHS Compliant – SGS Test Report

Pb	Cd	Hg	Cr+6	PBB	PBDE
<1000ppm	ND	ND	ND	ND	ND

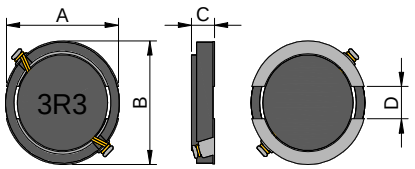
* Part No. Example:

PN	GXRD	0715	P	- 3R3	M	[ ]
ID	1	2	3	4	5	6

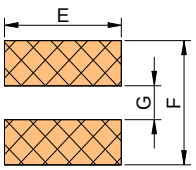
1	GOTREND Series Code
2	Dimension Code : 0715 = (L) 7.3 x (W) 7.3 x (H) 1.5 mm
3	RoHS Compliance
4	Inductance : 3R3 = 3.3uH Ex: 100=10uH, 101=100uH
5	Tolerance: M=20%, N=25%
6	Special Code for specific item : S=Custom Design

* Dimensions: [mm]

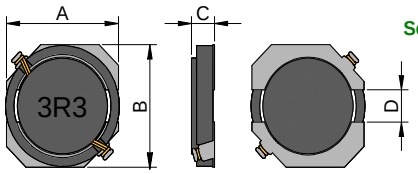
GXRD0715 TYPE



Recommend Pad Layout [mm]



GXRD1015 / 1024 TYPE



Schematic

* Operating & Storage Condition:

1.Storage Condition	-40 ~ +85 ° C / RH 65 ± 10%
2.Storage Life Time	6 Months @ 20 ° C / RH 65% (no seal off)
3.Operating Condition	-40 ~ +85 ° C (Including self-temperature rise)

Attention & Caution:

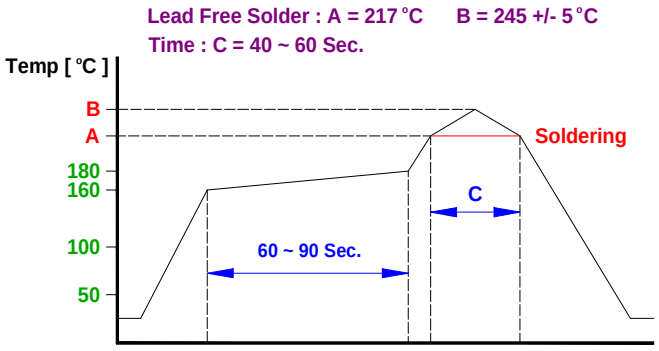
* Keep out of splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condense
* Please be careful for the stress to this product by board flexure or something after the mounting.

Size Code	A (Max)	B (Max)	C (Max)	D (Ref)	E (Ref)	F (Ref)	G (Ref)
0715	7.3	7.3	1.5	2.0	7.3	7.3	2.0
1015	10.3	10.3	1.5	3.0	10.4	10.4	3.0
1024	10.3	10.3	2.4	3.0	10.4	10.4	3.0

* Test Condition:

Equipment	1.L – WK3260 LCR Meter 2.RDC – Twintex TM8089A 3.IDC – WK3260+3265B DC-Bias 4.Dimension - Mitutoyo 5.Temperature – TECPEL 305A
Ambient	Temperature 20 ± 5 ° C Humidity RH 65 ± 20%
	If there may be any doubt on the test result, Measurement shall be made within the following limits:
Ambient	Temperature 25 ± 5 ° C Humidity RH 75 ± 10%

* Recommend IR Reflow Curve: GTX-IR-FILE001



Notice : Iron Soldering , Solder < 30 Watt , Direct touch the terminal x 3 Sec. Max. @ 350 °C

Product Series Code:	**GXRD**	Brand:	GOTREND
File Version:	GXRD-V1R1	Editor:	Teddy
Established Date:	2010.02.09	Description:	SMD Shielded Power Inductor
Latest Edit Date:	13/2/23		

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GXRD0715P-2R7□	2.70	M	45.0	54.0	2400	2400
GXRD0715P-3R3□	3.30	M	50.0	60.0	2100	2100
GXRD0715P-4R7□	4.70	M	70.0	84.0	1700	1700
GXRD0715P-6R8□	6.80	M	90.0	108.0	1500	1500
GXRD0715P-100□	10.00	M	140.0	168.0	1250	1250
GXRD0715P-150□	15.00	M	190.0	228.0	1050	1050
GXRD0715P-220□	22.00	M	280.0	336.0	850	850
GXRD0715P-470□	47.00	M	600.0	720.0	550	550
GXRD0715P-680□	68.00	M	850.0	1020.0	500	500

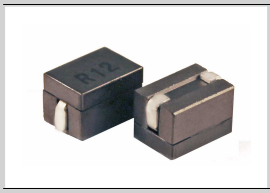
- Inductance test Freq. : 100KHz / 0.3V
- L-Tolerance : M = 20%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GXRD1015P-2R7□	2.70	N	35.0	42.0	3600	3600
GXRD1015P-3R3□	3.30	N	45.0	54.0	3400	3400
GXRD1015P-4R7□	4.70	N	55.0	66.0	2900	2900
GXRD1015P-6R8□	6.80	N	80.0	96.0	2300	2300
GXRD1015P-100□	10.00	N	110.0	132.0	2000	2000
GXRD1015P-220□	22.00	N	240.0	288.0	1400	1400
GXRD1015P-470□	47.00	N	500.0	600.0	900	900

- Inductance test Freq. : 100KHz / 0.3V
- L-Tolerance : N = 25%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 10%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Typ.	Irms (mA) Typ.
GXRD1024P-2R7□	2.70	N	18.0	22.5	5000	3800
GXRD1024P-3R3□	3.30	N	23.0	28.8	4400	3400
GXRD1024P-4R7□	4.70	N	32.0	40.0	3700	3200
GXRD1024P-6R8□	6.80	N	39.0	48.8	3300	3100
GXRD1024P-100□	10.00	N	65.0	81.3	2700	2500
GXRD1024P-150□	15.00	N	90.0	112.5	2250	2100
GXRD1024P-220□	22.00	N	130.0	162.5	1850	1850
GXRD1024P-330□	33.00	N	180.0	225.0	1500	1500
GXRD1024P-470□	47.00	N	250.0	312.5	1270	1200

- Inductance test Freq. : 100KHz / 0.3V
- L-Tolerance : N = 25%
- The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20℃)
- The temperature rise current value (Irms) DC current value having temperature increase up to 40℃ . (at 20℃)



Product Series Code	**GTV**	Brand	GOTREND
File Version	GTV-V1R3	Editor	Teddy
Established Date	2011.09.21	Description	SMD Power Choke
Latest Edit Date	2013.02.23		

Features & Application:

* SMD Powre Choke for High Current Capacity
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* PC / IPC / Handheld Device / LowProfile Device / LCD...

Product Structure

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

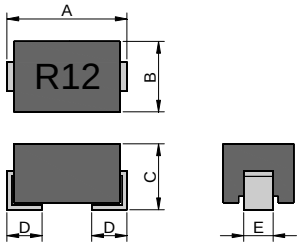
鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example:

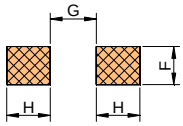
GTV - 1008 P - R12 M

1. GOTREND Series : GTV
2. Dimension Code : 10.8 x 8.0 x 7.2 mm
3. P = Pb free < 1000ppm
4. [L] Value Ex : R12 = 0.12 uH
5. Tolerance : M = 20%

DIMENSION : [mm]



Recommend Pad Layout [mm]



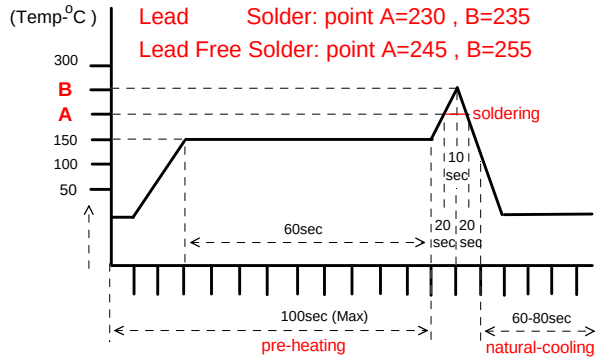
TYPE	A [Max.]	B [Max.]	C [Max.]	D [+/-0.25]	E [+/-0.25]	F [Ref.]	G [Ref.]	H [Ref.]
1008	10.80	8.00	7.20	2.55	2.20	2.80	4.30	3.05

Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15°C
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:75+/-10%

Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260° C

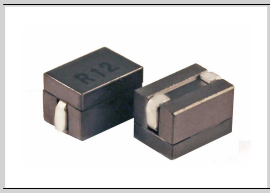
Operating & Storage Condition:

OPERATING TEMP:-40~+125°C

STORAGE TEMP:-40~+85°C
STORAGE LIFE TIME: 12 MONTH @25°C , RH 65%

Attention & Caution:

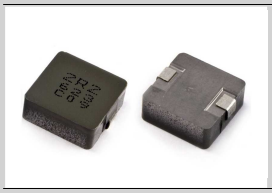
Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.



Product Series Code	**GTV**	Brand	GOTREND
File Version	GTV-V1R3	Editor	Teddy
Established Date	2011.09.21	Description	SMD Power Choke
Latest Edit Date	2013.02.23		

Part NO.	Inductance (uH)	DC Resistance (m Ohm) Max.	Isat (A) Typ.	Irms (A) Typ.
GTV1008P-R12M	0.12	0.42	50	22
GTV1008P-R15M	0.15	0.42	40	22
GTV1008P-R30M	0.30	0.42	30	22
GTV1008P-R47M	0.47	0.42	20	22

Note 1. Inductance test Freq. : 100KHz / 0.1V
Note 2. L - Tolerance : M = ± 20%
Note 3. The saturation current value (Isat) is the DC current value having inductance decreasa down to 20% (at 25 deg.C)
Note 4. The temperature rise current value (Irms) is the DC current value having temperature increase up to 40 deg.C



Product Series Code	**GSTC**	Brand	GOTREND
File Version	GSTC-V5R9	Editor	Teddy
Established Date	2009.09.01	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Features & Application:

* High performance (Isat) realized by metal dust core.
* Low profile : 4.5mm x 4.3mm x 2.0mm
* Low loss realized with low DCR
* Capable of corresponing high frequency (1MHz)
  100% lead (Pb) free meet RoHS standard
  DC/DC converter for CPU in Notebook PC

Product Structure

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example:

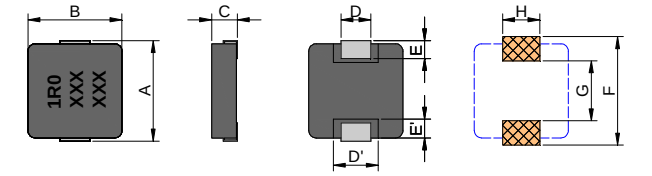
GSTC	061	P	-	R10	M	S
1	2	3		4	5	6

1.GOTREND Series : GSTC
2.Type Size Code : 061=7.4 X 6.8 X 1.8
3. P=Pb free < 1000ppm
4. [L] Value : Inductance R10=0.10uH
5. [L] Tolerance: M=+/-20%
6. Materials : [N] [S] [F] type

Custom Design Elec.Char:			
P/N	Inductance	RDC (max)	IDC(max)

DIMENSION : [mm]

RECOMMEND PAD LAYOUT



TYPE	A[Max.]	B[Max.]	C[Max.]	D	D'	E	E'	F[Ref.]	G[Ref.]	H[Ref.]
042	4.5	4.3	2.0	1.5+/-0.3	2.2+/-0.2	0.8+/-0.3	1.0+/-0.1	5.2	2.2	2.5
053	5.2	4.9	3.0	1.5+/-0.3	2.2+/-0.2	1.0+/-0.3	1.5+/-0.1	7.0	3.0	2.5
061	7.4	6.8	1.8	3.0+/-0.3	3.6+/-0.2	1.6+/-0.3	2.0+/-0.1	8.4	3.7	3.5
063	7.3	6.8	3.0	3.0+/-0.3	3.6+/-0.2	1.6+/-0.3	2.0+/-0.1	8.4	3.7	3.5
104	11.5	10.3	4.0	3.0+/-0.5	5.0+/-0.2	2.0+/-0.5	2.5+/-0.1	13.6	5.4	4.1
133	13.8	12.8	3.5	BY ITEM	6.0+/-0.2	2.0+/-0.5	2.5+-/0.1	14.5	8.5	5.0
135	14.0	12.8	5.2	BY ITEM	6.0+/-0.2	2.0+/-0.5	2.5+/-0.1	14.5	8.0	5.0

GSTC133P TYPE " D " Dimension : L < 1R0 : 4.0 mm +/-0.5 ; L >= 1R0 : 3.0 mm +/-0.5
GSTC135P TYPE " D " Dimension : L < 2R2 : 4.0 mm +/-0.5 ; L >= 2R2 : 3.0 mm +/-0.5

Test Equipment :

* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source

Standard Atmospheric Conditions:
Ambient Temp:20+/-15°C
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:75+/-10%

Marking and Date Code:

Marking

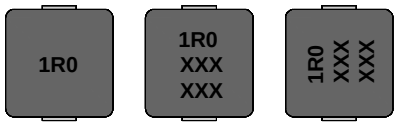
The inductor is marked with a 3-digit code
Example : 4.7uH → 4R7

Date Code

X XX (1) Year Ex : 2005 = 5
(1) (2) (2) Weekly Serial number : 01 ~ 52

Taping No.

Marking Direction:



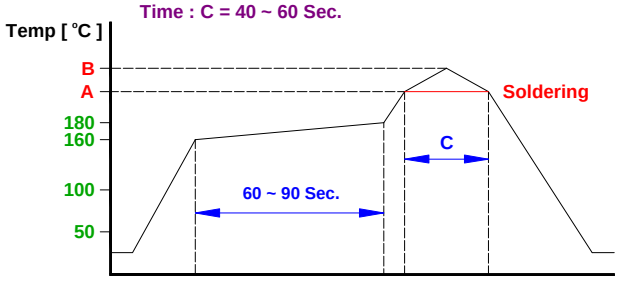
GSTC042 | GSTC042 GSTC053 GSTC06X | GSTC104 GSTC133 GSTC135

Operatiing & Storage Condition:

OPERATING TEMP:-55~+125°C
STORAGE TEMP:-25~+35°C
STORAGE LIFE TIME: 12 MONTH @25°C , RH 70%

Recommend IR Reflow Curve :

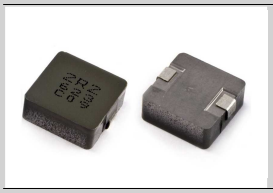
Lead Free Solder : A = 217 °C B = 245 +/- 5 °C
Time : C = 40 ~ 60 Sec.



Notice : Iron Soldering , Solder < 30 Watt , Direct touch the terminal x 3 Sec. Max. @ 350 °C

Attention & Caution:

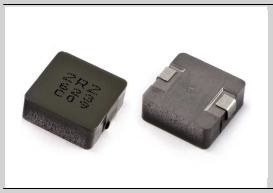
Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exced the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.



Product Series Code	**GSTC**	Brand	GOTREND
File Version	GSTC-V5R9	Editor	Teddy
Established Date	2009.09.01	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Part No.	Inductance L(uH) +/- 20%	RDC (m ohm) [Typ] / [Max]	Irms (Amp) Tpy.	Isat (Amp) Typ.
GSTC042 P-R10MN	0.10	4.50 / 5.00	11.0	30.0
GSTC042 P-R22MN	0.22	7.30 / 8.00	9.0	17.0
GSTC042 P-R47MN	0.47	14.00 /15.50	6.0	11.5
GSTC042 P-1R0MN	1.00	32.00 / 36.00	3.8	8.5
GSTC042 P-R10MS	0.10	3.50 / 4.00	12.0	22.0
GSTC042 P-R22MS	0.22	6.00 / 6.60	9.0	12.5
GSTC042 P-R47MS	0.47	12.50 /14.00	7.0	9.5
GSTC042 P-1R0MS	1.00	24.00 / 27.00	4.5	7.0
GSTC042 P-1R5MS	1.50	38.00 / 46.00	4.0	6.0
GSTC042 P-2R2MS	2.20	52.00 / 58.00	3.0	5.0
GSTC042 P-3R3MS	3.30	74.00 / 87.00	2.5	4.0
GSTC053 P-R68MS	0.68	11.0 / 12.00	8.5	14.0
GSTC053 P-1R0MS	1.00	13.0 / 14.00	7.0	11.0
GSTC053 P-1R2MS	1.20	15.0 / 16.00	6.5	11.0
GSTC053 P-1R5MS	1.50	20.0 / 25.00	6.0	10.0
GSTC053 P-2R2MS	2.20	29.0 / 35.00	5.5	9.0
GSTC053 P-3R3MS	3.30	32.0 / 38.00	5.0	7.0
GSTC053 P-4R7MS	4.70	50.0 / 60.00	3.0	5.0
GSTC061 P-R10MS	0.10	2.00 / 2.50	18.0	45.0
GSTC061 P-R33MS	0.33	5.20 / 6.80	12.0	22.0
GSTC061 P-R47MS	0.47	7.30 / 8.40	11.0	18.0
GSTC061 P-R68MS	0.68	10.80 / 12.70	9.0	17.0
GSTC061 P-1R0MS	1.00	14.50 / 17.00	7.0	14.0
GSTC061 P-2R0MS	2.00	28.00 / 32.00	6.0	13.0
GSTC061 P-2R2MS	2.20	31.00 / 35.00	6.0	13.0
GSTC061 P-3R3MS	3.30	56.00 / 60.00	3.5	10.0
GSTC061 P-4R7MS	4.70	68.00 / 70.00	3.5	5.0
GSTC063 P-1R5MS	1.50	10.80 / 12.00	9.0	11.5
GSTC063 P-2R2MS	2.20	18.00 / 20.00	8.0	10.0
GSTC063 P-4R7MS	4.70	32.50 / 35.00	5.5	6.5
GSTC063 P-8R2MS	8.20	54.00 / 60.00	4.5	6.0
GSTC063 P-100MS	10.00	62.00 / 68.00	4.0	5.5
GSTC063 P-R10MN	0.10	1.50 / 1.70	32.5	60.0
GSTC063 P-R20MN	0.20	2.40 / 3.00	24.0	41.0
GSTC063 P-R22MN	0.22	2.50 / 2.80	23.0	40.0
GSTC063 P-R25MN	0.25	3.00 / 3.50	21.0	39.0
GSTC063 P-R33MN	0.33	3.50 / 3.90	20.0	30.0
GSTC063 P-R47MN	0.47	4.00 / 4.20	17.5	26.0
GSTC063 P-R56MN	0.56	4.70 / 5.00	16.5	25.5
GSTC063 P-R68MN	0.68	5.00 / 5.50	15.5	25.0
GSTC063 P-R82MN	0.82	6.70 / 8.00	13.0	24.0
GSTC063 P-R90MN	0.90	9.00 / 10.00	11.0	22.0
GSTC063 P-1R0MN	1.00	9.00 / 10.00	11.0	22.0
GSTC063 P-1R2MN	1.20	10.00 / 12.00	10.0	20.0
GSTC063 P-1R5MN	1.50	14.00 / 15.00	9.0	18.0
GSTC063 P-2R2MN	2.20	18.00 / 20.00	8.0	14.0
GSTC063 P-3R3MN	3.30	28.00 / 30.00	6.0	13.5
GSTC063 P-2R5MN	2.50	20.00 / 22.00	7.0	14.0
GSTC063 P-4R7MN	4.70	37.00 / 40.00	5.5	10.0
GSTC063 P-6R8MN	6.80	54.00 / 60.00	4.5	8.0

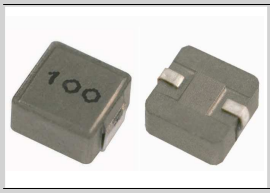
*Test Condition@100KHz,1.0Vrms, 25°C Ambient
* Isat: Saturated Current measured at the point of L drop approximately 20% [N / F TYPE]
Saturated Current measured at the point of L drop approximately 30% [S TYPE]
* Irms: Rated Current Loading when temperature rise approximately 40°C
* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.



Product Series Code	**GSTC**	Brand	GOTREND
File Version	GSTC-V5R9	Editor	Teddy
Established Date	2009.09.01	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Part No.	Inductance L(uH) +/- 20%	RDC (m ohm) [Typ] / [Max]	Irms (Amp) Tpy.	Isat (Amp) Typ.
GSTC104 P-R15MN	0.15	0.50 / 0.65	40.0	75.0
GSTC104 P-R19MN	0.19	0.70 / 0.80	38.0	60.0
GSTC104 P-R36MN	0.36	1.05 / 1.20	30.0	60.0
GSTC104 P-R22MN	0.22	0.90 / 1.00	35.0	60.0
GSTC104 P-R39MN	0.39	1.10/1.30	30.0	60.0
GSTC104 P-R41MN	0.41	1.10 / 1.30	30.0	60.0
GSTC104 P-R45MN	0.45	1.10 / 1.30	29.0	45.0
GSTC104 P-R47MN	0.47	1.60 / 1.80	26.0	40.0
GSTC104 P-R56MN	0.56	1.60 / 1.80	25.0	40.0
GSTC104 P-R68MN	0.68	2.40 / 2.70	22.0	39.0
GSTC104 P-R88MN	0.88	2.70 / 3.00	20.0	38.0
GSTC104 P-1R0MN	1.00	3.00 / 3.30	18.0	36.0
GSTC104 P-1R5MN	1.50	3.80 / 4.20	16.0	33.0
GSTC104 P-2R2MN	2.20	6.70 / 7.00	12.0	27.0
GSTC104 P-4R7MN	4.70	15.00 / 16.50	9.5	17.0
GSTC133 P-R22MF	0.22	1.10 / 1.30	38.0	65.0
GSTC133 P-R33MF	0.33	1.30 / 1.50	36.5	62.0
GSTC133 P-R39MF	0.39	1.10 / 1.30	38.0	65.0
GSTC133 P-R47MF	0.47	1.70 / 2.00	32.0	55.0
GSTC133 P-R56MF	0.56	1.80 / 2.20	29.0	51.0
GSTC133 P-R62MF	0.62	1.80 / 2.20	29.0	51.0
GSTC133 P-R68MF	0.68	2.30 / 2.50	28.0	49.0
GSTC133 P-1R0MF	1.00	3.30 / 3.50	24.0	40.0
GSTC133 P-1R5MF	1.50	5.10 / 5.50	19.0	35.0
GSTC133 P-2R2MF	2.20	7.20 / 8.0	16.0	29.0
GSTC133 P-3R3MF	3.30	10.0 / 12.0	12.0	27.0
GSTC135 P-R15MF	0.15	0.55 / 0.70	45.0	110.0
GSTC135 P-R36MF	0.36	0.77 / 1.10	41.0	75.0
GSTC135 P-R47MF	0.47	1.10 / 1.30	38.0	65.0
GSTC135 P-R50MF	0.50	1.20 / 1.50	36.0	55.0
GSTC135 P-R56MF	0.56	1.20 / 1.50	36.0	55.0
GSTC135 P-R62MF	0.62	1.50 / 1.70	34.0	54.0
GSTC135 P-R68MF	0.68	1.50 / 1.70	34.0	54.0
GSTC135 P-R82MF	0.82	1.80 / 2.10	31.0	53.0
GSTC135 P-1R0MF	1.00	2.10 / 2.50	29.0	50.0
GSTC135 P-1R2MF	1.20	2.60 / 3.00	25.0	49.0
GSTC135 P-1R5MF	1.50	3.40 / 4.10	23.0	48.0
GSTC135 P-2R2MF	2.20	4.60 / 5.50	20.0	32.0
GSTC135 P-3R3MF	3.30	7.70 / 9.20	15.0	32.0
GSTC135 P-4R7MF	4.70	12.8 / 15.0	12.0	27.0
GSTC135 P-6R3MF	6.30	15.4 / 18.5	11.0	21.0
GSTC135 P-6R8MF	6.80	15.4 / 18.5	11.0	21.0

*Test Condition@100KHz,1.0Vrms, 25°C Ambient
* Isat: Saturated Current measured at the point of L drop approximately 20% [N / F TYPE]
Saturated Current measured at the point of L drop approximately 30% [S TYPE]
* Irms: Rated Current Loading when temperature rise approximately 40°C
* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.



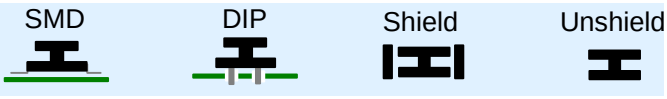
Product Series Code	**GSTD**	Brand	GOTREND
File Version	GSTD-V2R1	Editor	Teddy
Established Date	2011.08.08	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Features & Application :

* High performance (Isat) realized by metal dust core.
* Low profile : 3.6 mm x 3.2 mm x 1.2 mm
* Low loss realized with low DCR
* Capable of corresponing high frequency (1MHz)
  100% lead (Pb) free meet RoHS standard
  DC/DC converter for CPU in Notebook PC

Product Structure :

SMD ▼ DIP ▼ Shield Unshield



2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example :

GSTD 4020 P [ ] - 1R0 M

1 2 3 4 5 6

1.GOTREND Series : GSTD

2.Type Size Code : 4020 = 4.8 X 4.2 X 2.0

3. P = Pb free < 1000ppm

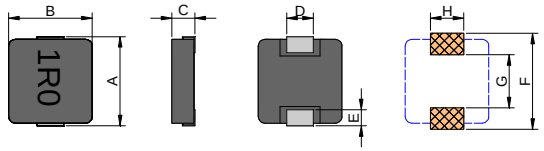
4. [E] [J] [L] [W] : Material Code

5. [L] Value : Inductance 1R0 = 1.0 uH

6. [L] Tolerance : M = +/-20%

DIMENSION : [mm]

RECOMMEND PAD LAYOUT



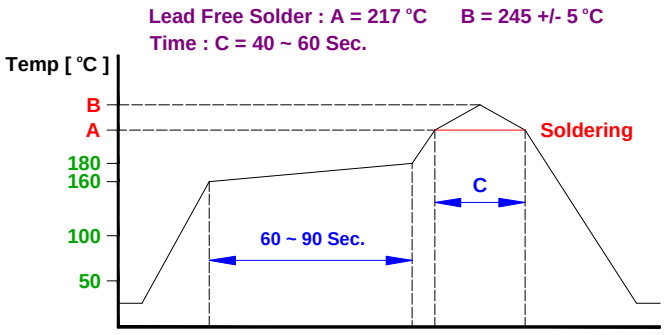
TYPE	A [Max.]	B [Max.]	C [Max.]	D	E	F [Ref.]	G [Ref.]	H [Ref.]
3012	3.6	3.2	1.2	BY ITEM	1.0+/-0.3	4.2	1.2	BY ITEM
3015	3.6	3.2	1.5	BY ITEM	1.0+/-0.3	4.2	1.2	BY ITEM
3020	3.6	3.2	2.0	BY ITEM	1.0+/-0.3	4.2	1.2	BY ITEM
4012	4.7	4.2	1.2	BY ITEM	1.0+/-0.3	4.8	2.2	BY ITEM
4015	4.7	4.2	1.5	BY ITEM	1.0+/-0.3	4.8	2.2	BY ITEM
4020	4.7	4.2	2.0	BY ITEM	1.0+/-0.3	4.8	2.2	BY ITEM
6012	7.4	6.9	1.2	BY ITEM	1.6+/-0.5	7.4	3.7	BY ITEM
6018	7.4	6.9	1.8	BY ITEM	1.6+/-0.3	7.4	3.7	BY ITEM
6030	7.4	6.9	3.0	BY ITEM	1.6+/-0.5	7.4	3.7	BY ITEM
6040	7.4	6.9	4.0	BY ITEM	1.6+/-0.5	7.4	3.7	BY ITEM
1040	12.5	11.0	4.0	BY ITEM	2.5+/-0.5	13.0	6.0	BY ITEM
1050	11.5	10.3	5.0	BY ITEM	2.0+/-0.5	12.0	5.5	BY ITEM

Test Equipment :

* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source

Standard Atmospheric Conditions :
Ambient Temp : 20+/-15ºC
Relative Humidity : 65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits :
Ambient Temp : 25+/-5ºC
Relative Humidity : 75+/-10%

Recommend IR Reflow Curve :



Notice : Iron Soldering , Solder < 30 Watt , Direct touch the terminal x 3 Sec. Max. @ 350 ℃

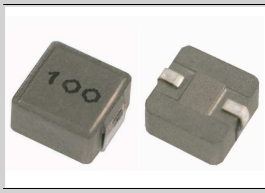
Operatiing & Storage Condition :

OPERATING TEMP : -55~+125ºC

STORAGE TEMP : -25~+35ºC
STORAGE LIFE TIME : 12 MONTH @25ºC , RH 70%

Attention & Caution :

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exced the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.



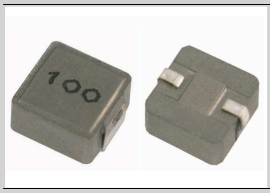
Product Series Code	**GSTD**	Brand	GOTREND
File Version	GSTD-V2R1	Editor	Teddy
Established Date	2011.08.08	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Electrical Characteristics :

Part No.	Inductance (uH) +/- 20%	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.	Dimension "D" (mm)	Dimension "H" (mm) Ref.
GSTD3012PJ-R22M	0.22	9.50	11.40	9.30	9.30	0.5 +/- 0.2	2.0
GSTD3012PJ-R33M	0.33	12.00	14.30	7.20	8.70	0.5 +/- 0.2	2.0
GSTD3012PJ-R47M	0.47	16.30	19.50	6.40	7.00	0.5 +/- 0.2	2.0
GSTD3012PJ-R56M	0.56	18.70	22.00	5.10	6.70	0.5 +/- 0.2	2.0
GSTD3012PJ-R68M	0.68	22.50	25.00	4.00	5.50	0.5 +/- 0.2	2.0
GSTD3012PJ-R82M	0.82	25.00	33.00	3.60	5.00	0.5 +/- 0.2	2.0
GSTD3012PJ-1R0M	1.00	33.00	38.00	3.00	4.50	0.5 +/- 0.2	2.0
GSTD3015PJ-R22M	0.22	9.50	11.40	8.50	9.00	0.5 +/- 0.2	2.0
GSTD3015PJ-R33M	0.33	11.50	13.80	7.80	7.00	0.5 +/- 0.2	2.0
GSTD3015PJ-R47M	0.47	12.70	15.00	6.70	6.70	0.5 +/- 0.2	2.0
GSTD3015PJ-R56M	0.56	17.00	20.40	6.00	5.50	0.5 +/- 0.2	2.0
GSTD3015PJ-R68M	0.68	18.40	22.00	5.40	5.50	0.5 +/- 0.2	2.0
GSTD3015PJ-R82M	0.82	22.50	26.00	4.90	5.50	0.5 +/- 0.2	2.0
GSTD3015PJ-1R0M	1.00	29.50	33.00	3.90	5.30	0.5 +/- 0.2	2.0
GSTD3015PJ-1R5M	1.50	41.00	46.00	2.70	4.50	0.5 +/- 0.2	2.0
GSTD3020PJ-R22M	0.22	9.50	11.40	6.50	7.50	0.5 +/- 0.2	2.0
GSTD3020PJ-R36M	0.36	11.50	13.80	6.30	6.50	0.5 +/- 0.2	2.0
GSTD3020PJ-R56M	0.56	16.20	19.40	5.50	5.50	0.5 +/- 0.2	2.0
GSTD3020PJ-R68M	0.68	17.00	20.40	5.50	5.00	0.5 +/- 0.2	2.0
GSTD3020PJ-1R0M	1.00	20.00	24.00	5.00	4.50	0.5 +/- 0.2	2.0
GSTD3020PJ-1R2M	1.20	24.00	27.00	5.00	4.50	0.5 +/- 0.2	2.0
GSTD3020PJ-1R5M	1.50	28.50	32.00	3.80	4.00	0.5 +/- 0.2	2.0
GSTD3020PJ-2R2M	2.20	42.90	46.00	3.00	3.30	0.5 +/- 0.2	2.0

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 20% [J TYPE]

* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.



Product Series Code	**GSTD**	Brand	GOTREND
File Version	GSTD-V2R1	Editor	Teddy
Established Date	2011.08.08	Description	High Current Inductor
Latest Edit Date	2013.02.23		

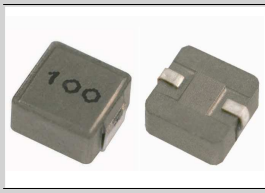
Electrical Characteristics :

Part No.	Inductance (uH) +/- 20%	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.	Dimension "D" (mm)	Dimension "H" (mm) Ref.
GSTD4012PJ-R22M	0.22	7.80	9.30	9.00	10.00	0.6 +/- 0.1	1.5
GSTD4012PJ-R47M	0.47	16.50	20.00	6.50	9.00	0.6 +/- 0.1	1.5
GSTD4012PJ-R56M	0.56	22.00	25.00	5.50	8.00	0.6 +/- 0.1	1.5
GSTD4012PJ-1R0M	1.00	28.30	33.60	4.80	6.33	0.6 +/- 0.1	1.5
GSTD4012PJ-1R2M	1.20	41.00	45.00	3.00	6.00	0.6 +/- 0.1	1.5
GSTD4012PJ-1R5M	1.50	45.00	50.00	3.00	5.50	0.6 +/- 0.1	1.5
GSTD4012PJ-2R2M	2.20	60.00	66.00	2.70	4.50	0.6 +/- 0.1	1.5
GSTD4015PJ-R22M	0.22	6.40	7.60	9.50	11.00	0.6 +/- 0.1	1.5
GSTD4015PJ-R47M	0.47	12.00	14.40	7.50	9.00	0.6 +/- 0.1	1.5
GSTD4015PJ-1R0M	1.00	23.50	27.00	5.00	7.00	0.6 +/- 0.1	1.5
GSTD4015PJ-1R2M	1.20	28.30	33.60	4.90	6.00	0.6 +/- 0.1	1.5
GSTD4020PJ-R22M	0.22	5.40	7.00	11.50	11.50	0.6 +/- 0.1	1.5
GSTD4020PJ-R36M	0.36	9.50	12.00	9.00	11.00	0.6 +/- 0.1	1.5
GSTD4020PJ-R47M	0.47	10.00	12.00	7.00	10.00	0.6 +/- 0.1	1.5
GSTD4020PJ-R56M	0.56	12.80	14.70	7.00	8.00	0.6 +/- 0.1	1.5
GSTD4020PJ-R68M	0.68	13.50	17.00	6.30	7.00	0.6 +/- 0.1	1.5
GSTD4020PJ-R82M	0.82	16.00	18.00	6.00	6.50	0.6 +/- 0.1	1.5
GSTD4020PJ-R88M	0.88	16.00	18.00	6.00	6.50	0.6 +/- 0.1	1.5
GSTD4020PJ-1R0M	1.00	18.00	21.50	5.00	5.00	0.6 +/- 0.1	1.5
GSTD4020PJ-1R2M	1.20	19.00	22.00	5.00	5.00	0.6 +/- 0.1	1.5
GSTD4020PJ-1R5M	1.50	25.40	29.00	5.00	5.00	0.6 +/- 0.1	1.5
GSTD4020PJ-2R2M	2.20	28.00	33.00	3.90	5.00	0.6 +/- 0.1	1.5
GSTD4020PJ-3R3M	3.30	33.00	40.00	3.30	4.30	0.6 +/- 0.1	1.5
GSTD4020PJ-4R7M	4.70	68.00	75.00	2.70	4.00	0.6 +/- 0.1	1.5

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 20% [J TYPE]

* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.

Electrical Characteristics :

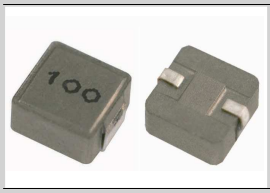


Product Series Code	**GSTD**	Brand	GOTREND
File Version	GSTD-V2R1	Editor	Teddy
Established Date	2011.08.08	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Part No.	Inductance (uH) +/- 20%	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.	Dimension "D" (mm)	Dimension "H" (mm) Ref.
GSTD6012PW-R47M	0.47	15.00	17.00	8.00	11.00	3.0 +/- 0.3	3.5
GSTD6012PW-R68M	0.68	17.00	19.00	7.00	8.00	3.0 +/- 0.3	3.5
GSTD6012PW-1R0M	1.00	26.00	28.00	6.00	7.00	3.0 +/- 0.3	3.5
GSTD6012PW-1R5M	1.50	35.50	40.80	4.00	6.00	3.0 +/- 0.3	3.5
GSTD6012PW-2R2M	2.20	67.00	90.60	3.50	4.50	3.0 +/- 0.3	3.5
GSTD6012PW-3R3M	3.30	86.50	103.00	3.00	3.60	3.0 +/- 0.3	3.5
GSTD6012PW-4R7M	4.70	130.00	170.00	2.40	2.80	3.0 +/- 0.3	3.5
GSTD6012PW-6R8M	6.80	189.00	217.00	2.10	2.40	3.0 +/- 0.3	3.5
GSTD6012PW-100M	10.00	250.00	290.00	1.80	2.20	3.0 +/- 0.3	3.5
GSTD6018PW-R47M	0.47	8.80	9.30	11.00	18.00	3.0 +/- 0.3	3.5
GSTD6018PW-1R0M	1.00	18.00	18.30	7.00	14.00	3.0 +/- 0.3	3.5
GSTD6018PW-1R5M	1.50	27.40	34.00	4.00	11.50	3.0 +/- 0.3	3.5
GSTD6018PW-2R2M	2.20	44.60	46.00	3.75	11.00	3.0 +/- 0.3	3.5
GSTD6018PW-3R3M	3.30	78.00	84.00	3.50	8.00	3.0 +/- 0.3	3.5
GSTD6018PW-4R7M	4.70	98.00	110.00	3.00	5.00	3.0 +/- 0.3	3.5
GSTD6030PW-R20M	0.20	2.00	3.00	24.00	41.00	3.0 +/- 0.3	3.5
GSTD6030PW-R33M	0.33	2.10	3.40	20.00	30.00	3.0 +/- 0.3	3.5
GSTD6030PW-R47M	0.47	4.00	5.30	17.50	26.00	3.0 +/- 0.3	3.5
GSTD6030PW-R68M	0.68	4.60	6.40	16.00	25.00	3.0 +/- 0.3	3.5
GSTD6030PW-R82M	0.82	4.90	7.80	13.00	24.00	3.0 +/- 0.3	3.5
GSTD6030PW-1R0M	1.00	7.40	9.40	12.00	22.00	3.0 +/- 0.3	3.5
GSTD6030PW-1R5M	1.50	9.60	14.00	10.00	18.00	3.0 +/- 0.3	3.5
GSTD6030PW-2R2M	2.20	12.50	18.00	8.00	15.00	3.0 +/- 0.3	3.5
GSTD6030PW-3R3M	3.30	17.50	25.00	6.00	11.50	3.0 +/- 0.3	3.5
GSTD6030PW-4R7M	4.70	31.00	45.00	5.50	10.00	3.0 +/- 0.3	3.5
GSTD6030PW-5R6M	5.60	39.00	52.00	5.00	8.50	3.0 +/- 0.3	3.5
GSTD6030PW-6R8M	6.80	45.00	60.00	4.50	8.00	3.0 +/- 0.3	3.5
GSTD6030PW-8R2M	8.20	48.00	65.00	4.00	6.50	3.0 +/- 0.3	3.5
GSTD6030PW-100M	10.00	62.00	72.00	3.50	5.50	3.0 +/- 0.3	3.5
GSTD6030PW-150M	15.00	84.00	105.00	3.00	5.00	3.0 +/- 0.3	3.5
GSTD6030PW-220M	22.00	115.00	165.00	2.50	4.50	3.0 +/- 0.3	3.5

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 20% [W TYPE]
  [GSTD6018PW Saturated Current measured at the point of L drop approximately 30%]

* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.

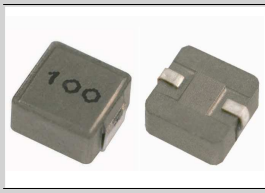


Product Series Code	**GSTD**	Brand	GOTREND
File Version	GSTD-V2R1	Editor	Teddy
Established Date	2011.08.08	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Electrical Characteristics :

Part No.	Inductance (uH) +/- 20%	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.	Dimension "D" (mm)	Dimension "H" (mm) Ref.
GSTD6030PE-R10M	0.10	1.50	1.70	32.50	60.00	3.0 +/- 0.3	3.5
GSTD6030PE-R15M	0.15	1.90	2.50	26.00	52.00	3.0 +/- 0.3	3.5
GSTD6030PE-R20M	0.20	2.40	3.00	24.00	41.00	3.0 +/- 0.3	3.5
GSTD6030PE-R22M	0.22	2.50	2.80	23.00	40.00	3.0 +/- 0.3	3.5
GSTD6030PE-R33M	0.33	3.50	3.90	20.00	30.00	3.0 +/- 0.3	3.5
GSTD6030PE-R47M	0.47	4.00	4.20	17.50	26.00	3.0 +/- 0.3	3.5
GSTD6030PE-R56M	0.56	5.00	5.50	15.50	25.00	3.0 +/- 0.3	3.5
GSTD6030PE-R68M	0.68	5.00	5.50	15.50	25.00	3.0 +/- 0.3	3.5
GSTD6030PE-R82M	0.82	6.70	8.00	13.00	24.00	3.0 +/- 0.3	3.5
GSTD6030PE-1R0M	1.00	9.00	10.00	11.00	22.00	3.0 +/- 0.3	3.5
GSTD6030PE-1R5M	1.50	14.00	15.00	9.00	18.00	3.0 +/- 0.3	3.5
GSTD6030PE-2R2M	2.20	18.00	20.00	8.00	14.00	3.0 +/- 0.3	3.5
GSTD6030PE-2R7M	2.70	18.00	20.00	8.00	11.00	3.0 +/- 0.3	3.5
GSTD6030PE-3R3M	3.30	28.00	30.00	6.00	13.50	3.0 +/- 0.3	3.5
GSTD6030PE-4R7M	4.70	37.00	40.00	5.50	10.00	3.0 +/- 0.3	3.5
GSTD6030PE-6R8M	6.80	54.00	60.00	4.50	8.00	3.0 +/- 0.3	3.5
GSTD6030PE-8R2M	8.20	64.00	68.00	4.00	7.50	3.0 +/- 0.3	3.5
GSTD6030PE-100M	10.00	102.00	105.00	3.00	7.00	3.0 +/- 0.3	3.5
GSTD6030PL-1R0M	1.00	7.60	8.00	12.50	9.50	3.0 +/- 0.3	3.5
GSTD6030PL-1R5M	1.50	11.70	12.50	10.50	8.00	3.0 +/- 0.3	3.5
GSTD6030PL-2R2M	2.20	15.70	16.50	9.00	7.00	3.0 +/- 0.3	3.5
GSTD6030PL-3R3M	3.30	24.80	26.00	7.00	6.50	3.0 +/- 0.3	3.5
GSTD6030PL-4R7M	4.70	31.80	33.40	6.00	4.00	3.0 +/- 0.3	3.5
GSTD6030PL-6R8M	6.80	44.60	46.80	5.50	4.00	3.0 +/- 0.3	3.5
GSTD6030PL-8R2M	8.20	52.30	54.90	5.00	4.00	3.0 +/- 0.3	3.5
GSTD6030PL-100M	10.00	67.80	71.20	4.00	3.50	3.0 +/- 0.3	3.5
GSTD6030PL-150M	15.00	110.00	125.00	3.50	3.00	3.0 +/- 0.3	3.5
GSTD6030PL-220M	22.00	128.90	135.00	2.90	2.50	3.0 +/- 0.3	3.5
GSTD6040PJ-R22M	0.22	2.00	2.40	30.00	34.00	1.2 +/- 0.3	2.5
GSTD6040PJ-R33M	0.33	3.00	2.40	18.00	30.00	1.2 +/- 0.3	2.5
GSTD6040PJ-R36M	0.36	3.60	4.30	18.00	28.00	1.2 +/- 0.3	2.5
GSTD6040PJ-R47M	0.47	3.80	4.50	17.00	27.00	1.2 +/- 0.3	2.5
GSTD6040PJ-R50M	0.50	2.80	3.40	20.00	21.00	1.2 +/- 0.3	2.5
GSTD6040PJ-R56M	0.56	4.30	5.00	16.00	20.00	1.2 +/- 0.3	2.5
GSTD6040PJ-R68M	0.68	4.50	5.00	16.00	20.00	1.2 +/- 0.3	2.5
GSTD6040PJ-R82M	0.33	5.50	6.60	13.00	17.00	1.2 +/- 0.3	2.5
GSTD6040PJ-1R1M	1.10	4.60	5.50	15.30	19.00	1.2 +/- 0.3	2.5
GSTD6040PJ-1R5M	1.50	8.00	10.00	11.50	13.00	1.2 +/- 0.3	2.5
GSTD6040PJ-2R2M	2.20	9.80	12.00	11.00	11.00	1.2 +/- 0.3	2.5
GSTD6040PJ-3R3M	3.30	12.50	16.00	10.00	10.00	1.2 +/- 0.3	2.5
GSTD6040PJ-4R7M	4.70	18.40	24.00	6.70	8.00	1.2 +/- 0.3	2.5
GSTD6040PJ-5R6M	5.60	21.00	29.00	6.30	8.00	1.2 +/- 0.3	2.5
GSTD6040PJ-6R8M	6.80	29.00	33.00	6.00	7.00	1.2 +/- 0.3	2.5
GSTD6040PJ-8R2M	8.20	34.00	39.00	5.00	5.50	1.2 +/- 0.3	2.5
GSTD6040PJ-100M	10.00	42.50	45.00	4.10	5.00	1.2 +/- 0.3	2.5
GSTD6040PJ-120M	12.00	46.30	53.00	4.00	5.00	1.2 +/- 0.3	2.5
GSTD6040PJ-150M	15.00	57.30	60.00	3.60	4.30	1.2 +/- 0.3	2.5

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 20% [J TYPE]
  Saturated Current measured at the point of L drop approximately 30% [E / L TYPE]



Product Series Code	**GSTD**	Brand	GOTREND
File Version	GSTD-V2R1	Editor	Teddy
Established Date	2011.08.08	Description	High Current Inductor
Latest Edit Date	2013.02.23		

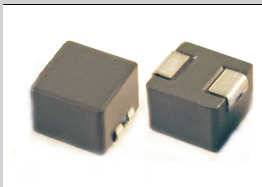
* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25°C Ambient.

Electrical Characteristics :

Part No.	Inductance (uH) +/- 20%	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.	Dimension "D" (mm)	Dimension "H" (mm) Ref.
GSTD1040PE-R19M	0.19	0.88	0.95	40.00	90.00	3.0 +/- 0.5	4.0
GSTD1040PE-R36M	0.36	1.30	1.40	31.50	60.00	3.0 +/- 0.5	4.0
GSTD1040PE-R56M	0.56	1.70	1.80	27.50	49.00	3.0 +/- 0.5	4.0
GSTD1040PE-1R0M	1.00	3.70	4.10	17.50	36.00	3.0 +/- 0.5	4.0
GSTD1040PE-1R5M	1.50	5.30	5.80	15.00	27.50	3.0 +/- 0.5	4.0
GSTD1040PE-2R2M	2.20	8.20	9.00	12.00	25.50	3.0 +/- 0.5	4.0
GSTD1040PE-3R3M	3.30	10.80	11.80	10.00	18.60	3.0 +/- 0.5	4.0
GSTD1040PE-4R7M	4.70	15.00	16.50	9.50	17.00	3.0 +/- 0.5	4.0
GSTD1040PE-5R6M	5.60	17.60	19.30	8.50	16.00	3.0 +/- 0.5	4.0
GSTD1040PE-6R8M	6.80	21.20	23.30	8.00	13.50	3.0 +/- 0.5	4.0
GSTD1040PE-8R2M	8.20	31.00	34.00	7.00	12.50	3.0 +/- 0.5	4.0
GSTD1040PE-100M	10.00	33.20	36.50	6.80	12.00	3.0 +/- 0.5	4.0
GSTD1040PL-R19M	0.19	0.70	0.80	40.00	46.00	3.0 +/- 0.5	4.0
GSTD1040PL-R24M	0.24	0.85	0.95	33.00	44.00	3.0 +/- 0.5	4.0
GSTD1040PL-R36M	0.36	1.05	1.15	32.00	30.00	3.0 +/- 0.5	4.0
GSTD1040PL-R47M	0.47	1.53	1.68	30.00	30.00	3.0 +/- 0.5	4.0
GSTD1040PL-R56M	0.56	1.60	1.80	32.00	22.00	3.0 +/- 0.5	4.0
GSTD1040PL-R78M	0.78	1.80	1.90	27.00	22.00	3.0 +/- 0.5	4.0
GSTD1040PL-1R0M	1.00	2.30	2.50	25.00	20.00	3.0 +/- 0.5	4.0
GSTD1040PL-1R8M	1.80	4.50	5.00	17.00	16.00	3.0 +/- 0.5	4.0
GSTD1040PL-2R0M	2.00	5.20	5.80	16.00	14.00	3.0 +/- 0.5	4.0
GSTD1040PL-4R7M	4.70	12.90	14.20	9.50	7.60	3.0 +/- 0.5	4.0
GSTD1040PL-6R8M	6.80	17.50	19.30	9.00	7.50	3.0 +/- 0.5	4.0
GSTD1040PL-100M	10.00	27.80	30.50	7.50	7.10	3.0 +/- 0.5	4.0
GSTD1040PL-150M	15.00	40.90	45.00	6.25	6.00	3.0 +/- 0.5	4.0
GSTD1040PL-220M	22.00	60.40	66.00	5.00	4.50	3.0 +/- 0.5	4.0
GSTD1040PL-330M	33.00	87.50	94.50	4.40	4.00	3.0 +/- 0.5	4.0
GSTD1040PL-470M	47.00	132.00	145.00	4.00	3.00	3.0 +/- 0.5	4.0
GSTD1040PL-101M	100.00	249.00	270.00	3.00	2.25	3.0 +/- 0.5	4.0
GSTD1050PJ-R45M	0.45	0.90	1.10	36.00	29.00	3.0 +/- 0.5	4.0
GSTD1050PJ-R56M	0.56	1.20	1.40	32.00	31.00	3.0 +/- 0.5	4.0
GSTD1050PJ-1R0M	1.00	2.30	2.50	25.00	25.00	3.0 +/- 0.5	4.0
GSTD1050PJ-1R2M	1.20	2.50	3.00	24.00	21.00	3.0 +/- 0.5	4.0
GSTD1050PJ-7R0M	7.00	16.50	20.40	8.00	12.00	1.8 +/- 0.5	3.0
GSTD1050PJ-150M	15.00	38.00	45.60	4.50	8.00	1.8 +/- 0.5	3.0
GSTD1050PJ-220M	22.00	51.00	61.20	4.00	7.00	1.8 +/- 0.5	3.0

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 20% [J TYPE]
  Saturated Current measured at the point of L drop approximately 30% [E / L TYPE]

* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25°C Ambient.



Product Series Code	**GSTM**	Brand	GOTREND
File Version	GSTM-V1R2	Editor	Teddy
Established Date	2012.09.26	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Features & Application :

* Carbonyl Powder.
* Compact design.
* High current , low DCR , high efficiency.
* Very low acoustic noise and very low leakage flux noise.
* High reliability.
* 100% Lead (Pb) - Free and RoHS compliant.
* Note PC power system , incl. IMVP-6 , DC / DC converter.

Product Structure :

SMD DIP Shield Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example :

GSTM (1) 3012 (2) P (3) - 1R0 (4) [ ] (5)

1.GOTREND Series : GSTM

2.Type Size Code : 3012 = 3.5 X 3.2 X 1.2

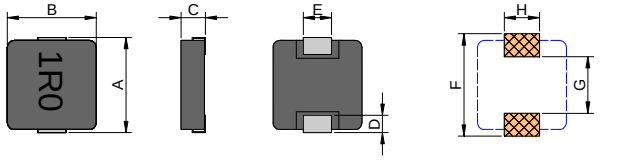
3. P = Pb free < 1000ppm

4. [L] Value : Inductance 1R0 = 1.0 uH

5. [L] Tolerance : M = +/-20% ; N = +/-30%

DIMENSION : [mm]

RECOMMEND PAD LAYOUT



TYPE	A	B	C	D	E	F	G	H
3012	3.50+/-0.20	3.20+/-0.20	1.00+/-0.20	0.70+/-0.20	1.20+/-0.20	4.10Ref.	1.90Ref.	1.45Ref.
3020	3.50+/-0.20	3.20+/-0.20	1.80+/-0.20	0.70+/-0.20	1.20+/-0.20	4.10Ref.	1.90Ref.	1.45Ref.
4012	4.45+/-0.25	4.06+/-0.25	1.00+/-0.20	0.76+/-0.30	2.00+/-0.20	5.20Ref.	2.20Ref.	2.40Ref.
4020	4.45+/-0.25	4.06+/-0.25	1.80+/-0.20	0.76+/-0.30	2.00+/-0.20	5.20Ref.	2.20Ref.	2.40Ref.
5012	5.70+/-0.30	5.20+/-0.20	1.00+/-0.20	1.10+/-0.30	2.50+/-0.30	6.20Ref.	2.20Ref.	2.80Ref.
5015	5.70+/-0.30	5.20+/-0.20	1.30+/-0.20	1.10+/-0.30	2.50+/-0.30	6.20Ref.	2.20Ref.	2.80Ref.
5018	5.70+/-0.30	5.20+/-0.20	1.60+/-0.20	1.10+/-0.30	2.50+/-0.30	6.20Ref.	2.20Ref.	2.80Ref.
5020	5.70+/-0.30	5.20+/-0.20	1.80+/-0.20	1.10+/-0.30	2.50+/-0.30	6.20Ref.	2.20Ref.	2.80Ref.
5030	5.70+/-0.30	5.20+/-0.20	2.80+/-0.20	1.10+/-0.30	1.50+/-0.30	6.20Ref.	2.20Ref.	1.80Ref.
6012	7.00+/-0.30	6.60+/-0.30	1.00+/-0.20	1.80+/-0.30	2.50+/-0.30	7.70Ref.	2.50Ref.	3.00Ref.
6015	7.00+/-0.30	6.60+/-0.30	1.30+/-0.20	1.80+/-0.30	3.00+/-0.30	7.70Ref.	2.50Ref.	3.50Ref.
6018	7.00+/-0.30	6.60+/-0.30	1.60+/-0.20	1.80+/-0.30	3.00+/-0.30	7.70Ref.	2.50Ref.	3.50Ref.
6020	7.00+/-0.30	6.60+/-0.30	1.80+/-0.20	1.80+/-0.30	3.00+/-0.30	7.70Ref.	2.50Ref.	3.50Ref.
6024	7.00+/-0.30	6.60+/-0.30	2.20+/-0.20	1.80+/-0.30	3.00+/-0.30	7.70Ref.	2.50Ref.	3.50Ref.
6030	7.30+/-0.30	6.60+/-0.30	2.80+/-0.20	1.80+/-0.30	3.00+/-0.30	8.40Ref.	2.50Ref.	3.50Ref.
6050	7.30+/-0.30	6.60+/-0.30	4.80+/-0.20	1.80+/-0.30	3.00+/-0.30	8.40Ref.	2.50Ref.	3.50Ref.
1030	11.00+/-0.50	10.00+/-0.30	2.80+/-0.20	2.30+/-0.30	3.00+/-0.30	13.60Ref.	5.40Ref.	3.50Ref.
1040	11.00+/-0.50	10.00+/-0.30	3.80+/-0.20	2.30+/-0.30	3.00+/-0.30	13.60Ref.	5.40Ref.	3.50Ref.
1238	13.50+/-0.50	12.50+/-0.30	3.60+/-0.20	2.30+/-0.30	4.70+/-0.30	14.20Ref.	8.00Ref.	5.00Ref.
1250	13.50+/-0.50	12.50+/-0.30	4.80+/-0.20	2.30+/-0.30	4.70+/-0.30	14.20Ref.	8.00Ref.	5.00Ref.
1260	13.50+/-0.50	12.50+/-0.30	5.70+/-0.30	2.30+/-0.30	4.70+/-0.30	14.20Ref.	8.00Ref.	5.00Ref.
1265	13.50+/-0.50	12.50+/-0.30	6.20+/-0.30	2.30+/-0.30	4.70+/-0.30	14.20Ref.	8.00Ref.	5.00Ref.

MARKING :

30XX TYPE (Inductance)

40XX TYPE (Inductance code)

50XX ~ 12XX TYPE (Inductance code & Date code) (1) Year ex. 2012 = 12 (2) Weekly serial number 01 ~ 52

Test Equipment :

* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source

Standard Atmospheric Conditions :
Ambient Temp : 20 +/- 15ºC
Relative Humidity : 65 +/- 20%
If there may be any doubt on the result,
measurement shall be made within the following limits :
Ambient Temp : 25 +/- 5ºC
Relative Humidity : 75 +/- 10%

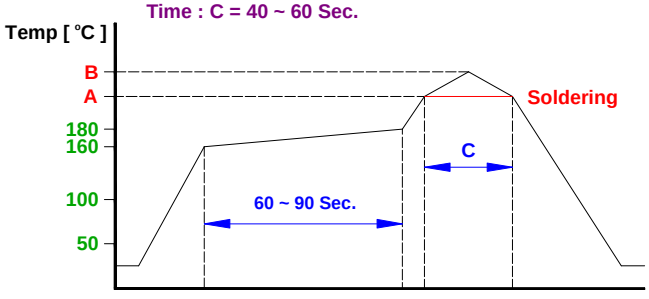
Operatiing & Storage Condition :

OPERATING TEMP : -40 ~ +125ºC

STORAGE TEMP : -40 ~ +125ºC
STORAGE LIFE TIME : 12 MONTH @25ºC , RH 70%

Recommend IR Reflow Curve :

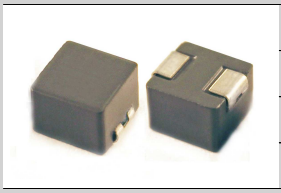
Lead Free Solder : A = 217 °C B = 245 +/- 5 °C
Time : C = 40 ~ 60 Sec.



Notice : Iron Soldering , Solder < 30 Watt , Direct touch the terminal x 3 Sec. Max. @ 350 °C

Attention & Caution :

Please avoid following matters :
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exced the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.



Product Series Code	**GSTM**	Brand	GOTREND
File Version	GSTM-V1R2	Editor	Teddy
Established Date	2012.09.26	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Electrical Characteristics :

Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM3012P-R47□	0.47	M	25.0	30.0	5.0	7.2
GSTM3012P-R68□	0.68	M	34.0	40.0	4.0	6.1
GSTM3012P-1R0□	1.00	M	50.0	60.0	3.0	5.5
GSTM3012P-1R5□	1.50	M	71.0	85.0	3.3	4.0
GSTM3012P-2R2□	2.20	M	98.0	115.0	3.0	3.4
GSTM3012P-3R3□	3.30	M	191.0	210.0	2.0	3.1
GSTM3012P-4R7□	4.70	M	266.0	293.0	1.6	2.8
GSTM3012P-6R8□	6.80	M	360.0	400.0	1.4	2.0
GSTM3012P-8R2□	8.20	M	420.0	463.0	1.2	1.7
GSTM3012P-100□	10.00	M	498.0	550.0	1.0	1.4

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Inductance Tolerance : M = +/-20%
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 30%

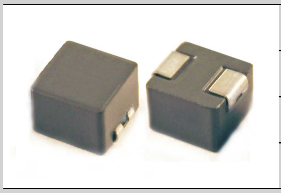
* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.

Electrical Characteristics :

Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM3020P-R47□	0.47	M	19.7	23.0	7.0	9.0
GSTM3020P-R68□	0.68	M	25.5	29.0	5.5	7.0
GSTM3020P-1R0□	1.00	M	32.0	38.0	4.0	5.0
GSTM3020P-1R5□	1.50	M	42.0	50.0	3.8	4.0
GSTM3020P-2R2□	2.20	M	65.0	75.0	3.5	3.7
GSTM3020P-3R3□	3.30	M	125.0	145.0	3.0	3.5
GSTM3020P-4R7□	4.70	M	172.0	200.0	2.6	3.0
GSTM3020P-5R6□	5.60	M	205.0	238.0	2.2	2.6
GSTM3020P-6R8□	6.80	M	260.0	300.0	1.9	2.2
GSTM3020P-8R2□	8.20	M	340.0	390.0	1.6	1.9
GSTM3020P-100□	10.00	M	366.0	422.0	1.4	1.6

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Inductance Tolerance : M = +/-20%
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 30%

* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.



Product Series Code	**GSTM**	Brand	GOTREND
File Version	GSTM-V1R2	Editor	Teddy
Established Date	2012.09.26	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Electrical Characteristics :

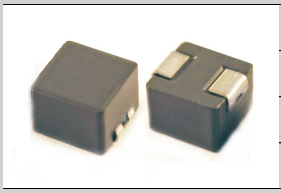
Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM4012P-R10□	0.10	N	4.3	5.5	11.5	25.0
GSTM4012P-R22□	0.22	M	6.6	8.0	8.5	20.0
GSTM4012P-R47□	0.47	M	18.0	20.0	6.0	6.5
GSTM4012P-1R0□	1.00	M	41.0	47.0	4.0	6.0
GSTM4012P-1R5□	1.50	M	55.0	63.3	3.0	4.0
GSTM4012P-2R2□	2.20	M	69.2	80.0	2.8	3.5
GSTM4012P-3R3□	3.30	M	84.0	97.0	2.3	3.0
GSTM4012P-4R7□	4.70	M	128.0	145.0	2.0	2.5
GSTM4012P-5R6□	5.60	M	180.0	208.0	1.7	2.3
GSTM4012P-6R8□	6.80	M	300.0	360.0	1.5	1.7
GSTM4012P-8R2□	8.20	M	313.0	376.0	1.4	1.6
GSTM4012P-100□	10.00	M	410.0	463.0	1.3	1.4

Electrical Characteristics :

Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM4020P-R10□	0.10	N	3.2	4.0	12.0	35.0
GSTM4020P-R18□	0.18	N	4.6	5.4	13.5	28.0
GSTM4020P-R22□	0.22	N	6.6	7.3	13.0	24.0
GSTM4020P-R33□	0.33	M	7.8	8.6	10.0	18.0
GSTM4020P-R47□	0.47	M	11.2	14.0	8.0	12.0
GSTM4020P-R56□	0.56	M	13.5	16.0	7.3	10.0
GSTM4020P-R68□	0.68	M	16.0	19.0	7.0	10.0
GSTM4020P-1R0□	1.00	M	22.0	27.0	5.0	8.5
GSTM4020P-1R2□	1.20	M	25.0	30.0	4.8	7.8
GSTM4020P-1R5□	1.50	M	34.8	42.0	4.5	7.0
GSTM4020P-2R2□	2.20	M	51.0	61.0	4.0	6.0
GSTM4020P-3R3□	3.30	M	69.0	76.0	3.5	4.0
GSTM4020P-4R7□	4.70	M	95.0	105.0	2.6	3.5
GSTM4020P-5R6□	5.60	M	112.0	125.0	2.2	3.0
GSTM4020P-6R8□	6.80	M	150.0	172.0	2.1	2.8
GSTM4020P-8R2□	8.20	M	158.0	180.0	2.0	2.5
GSTM4020P-100□	10.00	M	215.0	243.0	1.8	2.3
GSTM4020P-150□	15.00	M	325.0	374.0	1.5	1.9
GSTM4020P-220□	22.00	M	470.0	500.0	1.2	1.4

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Inductance Tolerance : M = +/-20% ; N = +/-30%
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 20%
  Saturated Current measured at the point of L drop approximately 30% at 0.18 uH

* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.



Product Series Code	**GSTM**	Brand	GOTREND
File Version	GSTM-V1R2	Editor	Teddy
Established Date	2012.09.26	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Electrical Characteristics :

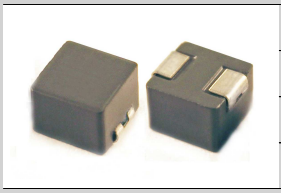
Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM5012P-R10□	0.10	N	4.3	5.2	14.0	14.5
GSTM5012P-R22□	0.22	N	5.5	6.7	10.7	14.0
GSTM5012P-R33□	0.33	M	7.8	9.4	8.5	13.5
GSTM5012P-R36□	0.36	M	10.0	11.5	8.0	13.0
GSTM5012P-R47□	0.47	M	13.6	15.8	7.0	11.0
GSTM5012P-R68□	0.68	M	21.5	24.5	6.0	9.0
GSTM5012P-1R0□	1.00	M	26.0	30.0	5.0	6.0
GSTM5012P-1R2□	1.20	M	33.0	40.0	4.5	5.5
GSTM5012P-1R5□	1.50	M	38.0	44.0	4.0	5.0
GSTM5012P-2R2□	2.20	M	65.0	75.0	3.5	4.0
GSTM5012P-3R3□	3.30	M	75.0	86.0	3.0	3.8
GSTM5012P-4R7□	4.70	M	100.0	115.0	2.5	3.2
GSTM5012P-5R6□	5.60	M	175.0	201.0	2.4	3.2
GSTM5012P-6R8□	6.80	M	193.0	222.0	2.0	3.0
GSTM5012P-8R2□	8.20	M	327.0	378.0	1.7	2.8
GSTM5012P-100□	10.00	M	335.0	385.0	1.5	1.8

Electrical Characteristics :

Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM5015P-R33□	0.33	M	8.5	9.8	9.0	16.0
GSTM5015P-R47□	0.47	M	12.0	13.8	8.0	15.0
GSTM5015P-R68□	0.68	M	14.0	16.2	7.0	13.0
GSTM5015P-1R0□	1.00	M	22.0	25.3	6.0	9.0
GSTM5015P-1R5□	1.50	M	39.0	45.0	4.5	7.0
GSTM5015P-2R2□	2.20	M	45.0	52.0	4.0	6.0
GSTM5015P-3R3□	3.30	M	78.0	90.0	3.2	4.5
GSTM5015P-4R7□	4.70	M	103.0	118.0	2.7	4.0
GSTM5015P-5R6□	5.60	M	126.0	152.0	2.4	3.2
GSTM5015P-6R8□	6.80	M	142.0	171.0	2.3	3.0
GSTM5015P-8R2□	8.20	M	175.0	210.0	2.1	2.6
GSTM5015P-100□	10.00	M	210.0	235.0	2.0	2.3

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Inductance Tolerance : M = +/-20%
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 20%

* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.



Product Series Code	**GSTM**	Brand	GOTREND
File Version	GSTM-V1R2	Editor	Teddy
Established Date	2012.09.26	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Electrical Characteristics :

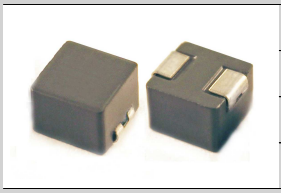
Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM5018P-R33□	0.33	M	7.5	8.6	11.0	15.0
GSTM5018P-R47□	0.47	M	9.8	11.3	10.0	14.0
GSTM5018P-R68□	0.68	M	12.4	14.3	9.0	13.0
GSTM5018P-1R0□	1.00	M	18.2	21.0	6.8	10.0
GSTM5018P-1R5□	1.50	M	26.0	30.0	6.0	9.0
GSTM5018P-2R2□	2.20	M	42.0	48.3	4.5	7.5
GSTM5018P-3R3□	3.30	M	60.0	69.0	3.5	5.0
GSTM5018P-4R7□	4.70	M	85.0	98.0	3.0	4.5
GSTM5018P-5R6□	5.60	M	110.0	127.0	2.5	4.0
GSTM5018P-6R8□	6.80	M	118.0	137.0	2.4	3.5
GSTM5018P-8R2□	8.20	M	143.0	165.0	2.3	3.0
GSTM5018P-100□	10.00	M	165.0	190.0	2.3	2.8

Electrical Characteristics :

Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM5020P-R33□	0.33	M	6.3	7.3	12.0	21.3
GSTM5020P-R47□	0.47	M	7.3	8.6	11.5	18.0
GSTM5020P-R68□	0.68	M	11.0	12.4	10.0	12.8
GSTM5020P-1R0□	1.00	M	17.5	20.0	7.0	13.7
GSTM5020P-1R2□	1.20	M	23.0	28.0	6.2	11.0
GSTM5020P-1R5□	1.50	M	26.5	30.5	5.5	9.8
GSTM5020P-2R2□	2.20	M	42.0	50.0	4.2	9.0
GSTM5020P-3R3□	3.30	M	66.0	76.0	3.3	7.3
GSTM5020P-4R7□	4.70	M	103.0	116.0	2.8	5.0
GSTM5020P-5R6□	5.60	M	112.0	122.0	2.5	4.0
GSTM5020P-6R8□	6.80	M	130.0	150.0	2.4	3.8
GSTM5020P-8R2□	8.20	M	148.0	171.0	2.3	3.5
GSTM5020P-100□	10.00	M	180.0	199.0	2.3	3.4

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Inductance Tolerance : M = +/-20%
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 20%

* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.



Product Series Code	**GSTM**	Brand	GOTREND
File Version	GSTM-V1R2	Editor	Teddy
Established Date	2012.09.26	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Electrical Characteristics :

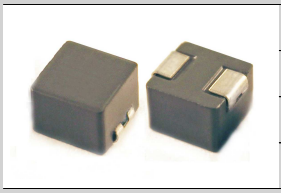
Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM5030P-R33□	0.33	M	4.3	5.0	14.00	18.0
GSTM5030P-R47□	0.47	M	6.4	7.4	12.00	16.0
GSTM5030P-R68□	0.68	M	10.0	12.0	8.50	14.0
GSTM5030P-1R0□	1.00	M	13.0	14.0	7.00	11.0
GSTM5030P-1R2□	1.20	M	14.0	16.0	6.50	11.0
GSTM5030P-1R5□	1.50	M	16.0	25.0	6.00	10.0
GSTM5030P-2R2□	2.20	M	25.0	35.0	5.50	9.0
GSTM5030P-3R3□	3.30	M	32.0	38.0	5.00	8.0
GSTM5030P-4R7□	4.70	M	50.0	53.0	4.60	6.0
GSTM5030P-5R6□	5.60	M	55.0	63.0	4.25	4.5
GSTM5030P-6R8□	6.80	M	68.0	76.2	4.00	4.3
GSTM5030P-100□	10.00	M	110.0	128.0	2.75	3.5

Electrical Characteristics :

Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM6012P-R22□	0.22	N	6.5	7.5	11.0	19.0
GSTM6012P-R33□	0.33	M	9.0	10.0	9.5	16.0
GSTM6012P-R47□	0.47	M	13.0	17.0	8.5	12.0
GSTM6012P-R68□	0.68	M	17.0	19.0	7.0	9.0
GSTM6012P-1R0□	1.00	M	27.0	30.0	6.0	7.0
GSTM6012P-1R2□	1.20	M	31.0	36.0	5.0	6.8
GSTM6012P-1R5□	1.50	M	35.0	40.0	4.5	6.5
GSTM6012P-2R2□	2.20	M	53.0	61.0	4.0	5.0
GSTM6012P-3R3□	3.30	M	90.0	103.0	3.2	4.0
GSTM6012P-4R7□	4.70	M	130.0	150.0	2.5	3.8
GSTM6012P-6R8□	6.80	M	172.0	198.0	2.1	3.0
GSTM6012P-100□	10.00	M	280.0	290.0	1.8	2.5

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Inductance Tolerance : M = +/-20% ; N = +/-30%
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 20%

* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.



Product Series Code	**GSTM**	Brand	GOTREND
File Version	GSTM-V1R2	Editor	Teddy
Established Date	2012.09.26	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Electrical Characteristics :

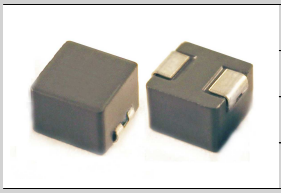
Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM6015P-R22□	0.22	N	4.3	5.2	14.0	22.0
GSTM6015P-R33□	0.33	M	6.6	7.6	11.0	18.0
GSTM6015P-R47□	0.47	M	9.0	10.3	9.5	16.0
GSTM6015P-R68□	0.68	M	13.8	15.2	7.5	15.0
GSTM6015P-1R0□	1.00	M	23.0	25.8	6.5	12.0
GSTM6015P-1R2□	1.20	M	29.0	34.0	5.6	10.5
GSTM6015P-1R5□	1.50	M	37.0	42.5	5.0	9.5
GSTM6015P-2R2□	2.20	M	48.0	55.0	4.5	6.5
GSTM6015P-3R3□	3.30	M	62.0	74.0	4.2	6.0
GSTM6015P-4R7□	4.70	M	96.0	111.0	3.8	5.0
GSTM6015P-5R6□	5.60	M	115.0	138.0	3.0	4.5
GSTM6015P-6R8□	6.80	M	128.0	148.0	2.6	3.5
GSTM6015P-8R2□	8.20	M	153.0	184.0	2.4	3.2
GSTM6015P-100□	10.00	M	180.0	216.0	2.3	2.8

Electrical Characteristics :

Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM6018P-R33□	0.33	M	4.8	5.8	14.0	22.0
GSTM6018P-R47□	0.47	M	6.4	7.4	12.0	18.0
GSTM6018P-R68□	0.68	M	9.5	11.0	10.0	17.0
GSTM6018P-R82□	0.82	M	11.5	14.0	8.5	15.5
GSTM6018P-1R0□	1.00	M	14.5	17.0	7.0	14.0
GSTM6018P-1R2□	1.20	M	20.0	24.0	6.5	13.5
GSTM6018P-1R5□	1.50	M	21.0	25.2	6.0	13.0
GSTM6018P-2R2□	2.20	M	31.0	35.0	6.0	11.0
GSTM6018P-3R3□	3.30	M	40.0	46.0	5.0	9.0
GSTM6018P-4R7□	4.70	M	68.0	76.0	4.0	7.0
GSTM6018P-5R6□	5.60	M	78.0	86.0	3.5	6.0
GSTM6018P-6R8□	6.80	M	93.0	104.0	3.0	5.5
GSTM6018P-8R2□	8.20	M	123.0	140.0	2.6	4.5
GSTM6018P-100□	10.00	M	143.0	160.0	2.3	3.5

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Inductance Tolerance : M = +/-20%
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 20%

* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.



Product Series Code	**GSTM**	Brand	GOTREND
File Version	GSTM-V1R2	Editor	Teddy
Established Date	2012.09.26	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Electrical Characteristics :

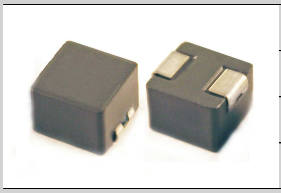
Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM6020P-R10□	0.10	N	2.0	2.4	21.0	40.0
GSTM6020P-R20□	0.20	N	2.5	3.0	18.0	35.0
GSTM6020P-R33□	0.33	M	4.5	5.0	14.0	25.0
GSTM6020P-R47□	0.47	M	7.1	8.3	11.7	20.0
GSTM6020P-R68□	0.68	M	8.3	10.0	10.5	16.0
GSTM6020P-1R0□	1.00	M	16.5	18.0	8.0	14.0
GSTM6020P-1R5□	1.50	M	23.0	27.0	7.0	12.0
GSTM6020P-2R2□	2.20	M	32.0	37.0	6.0	10.0
GSTM6020P-3R3□	3.30	M	43.0	48.0	5.0	8.0
GSTM6020P-4R7□	4.70	M	53.0	60.0	4.5	7.0
GSTM6020P-5R6□	5.60	M	59.0	68.0	4.0	6.0
GSTM6020P-6R8□	6.80	M	63.0	73.0	4.0	5.5
GSTM6020P-8R2□	8.20	M	101.0	116.0	3.2	5.0
GSTM6020P-100□	10.00	M	134.0	154.0	2.8	4.0
GSTM6020P-220□	22.00	M	236.0	280.0	1.5	2.5

Electrical Characteristics :

Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM6024P-R15□	0.15	N	1.8	2.3	30.0	45.0
GSTM6024P-R33□	0.33	M	3.6	4.4	18.0	30.0
GSTM6024P-R47□	0.47	M	4.8	5.1	15.0	26.0
GSTM6024P-R56□	0.56	M	5.5	6.5	13.0	24.0
GSTM6024P-R68□	0.68	M	6.4	7.2	13.0	21.0
GSTM6024P-R82□	0.82	M	8.0	9.5	11.0	17.0
GSTM6024P-1R0□	1.00	M	10.5	13.5	11.0	16.0
GSTM6024P-1R5□	1.50	M	17.0	20.0	9.0	15.0
GSTM6024P-2R2□	2.20	M	23.0	28.0	7.0	14.0
GSTM6024P-3R3□	3.30	M	34.0	39.0	6.0	10.0
GSTM6024P-4R7□	4.70	M	41.0	50.0	5.5	9.0
GSTM6024P-5R6□	5.60	M	56.0	62.0	5.0	8.0
GSTM6024P-6R8□	6.80	M	65.0	72.0	4.0	7.0
GSTM6024P-100□	10.00	M	92.0	101.0	3.2	5.0

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Inductance Tolerance : M = +/-20% ; N = +/-30%
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 20%

* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.



Product Series Code	**GSTM**	Brand	GOTREND
File Version	GSTM-V1R2	Editor	Teddy
Established Date	2012.09.26	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Electrical Characteristics :

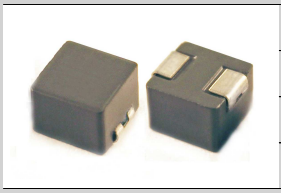
Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM6030P-R22□	0.22	N	2.1	2.8	23.0	40.0
GSTM6030P-R33□	0.33	M	3.5	3.9	20.0	32.0
GSTM6030P-R47□	0.47	M	4.0	4.2	17.5	26.0
GSTM6030P-R56□	0.56	M	4.7	5.0	16.5	25.5
GSTM6030P-R68□	0.68	M	4.8	5.5	15.5	25.0
GSTM6030P-R75□	0.75	M	5.5	6.6	14.5	24.5
GSTM6030P-R82□	0.82	M	6.7	8.0	13.0	24.0
GSTM6030P-1R0□	1.00	M	8.3	10.0	11.0	22.0
GSTM6030P-1R5□	1.50	M	13.0	15.0	9.0	18.0
GSTM6030P-1R8□	1.80	M	14.0	17.0	8.5	16.0
GSTM6030P-2R2□	2.20	M	18.0	20.0	8.0	14.0
GSTM6030P-2R5□	2.50	M	20.0	22.0	7.0	13.0
GSTM6030P-3R3□	3.30	M	28.0	30.0	6.0	13.5
GSTM6030P-4R7□	4.70	M	37.0	40.0	5.5	10.0
GSTM6030P-5R6□	5.60	M	43.0	48.0	5.0	9.0
GSTM6030P-6R8□	6.80	M	54.0	60.0	4.5	8.0
GSTM6030P-8R2□	8.20	M	64.0	68.0	4.0	7.5
GSTM6030P-100□	10.00	M	75.0	85.0	3.5	6.0
GSTM6030P-220□	22.00	M	165.0	190.0	2.0	3.5

Electrical Characteristics :

Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM6050P-R47□	0.47	M	3.5	3.9	22.0	30.0
GSTM6050P-R56□	0.56	M	3.6	4.2	20.0	27.0
GSTM6050P-R60□	0.60	M	3.8	4.3	19.0	25.0
GSTM6050P-R68□	0.68	M	4.0	4.5	18.0	24.0
GSTM6050P-R82□	0.82	M	4.6	4.9	16.5	22.0
GSTM6050P-1R0□	1.00	M	6.1	6.5	15.0	20.0
GSTM6050P-1R2□	1.20	M	6.7	7.5	14.0	18.0
GSTM6050P-1R5□	1.50	M	8.6	9.0	12.0	16.5
GSTM6050P-2R2□	2.20	M	11.2	12.0	10.0	14.0
GSTM6050P-3R3□	3.30	M	19.0	20.9	8.0	12.0
GSTM6050P-4R7□	4.70	M	28.0	30.8	6.5	10.0
GSTM6050P-5R6□	5.60	M	43.5	49.0	6.0	9.0
GSTM6050P-6R8□	6.80	M	46.0	51.5	5.5	8.5
GSTM6050P-8R2□	8.20	M	56.0	63.0	5.0	8.0
GSTM6050P-100□	10.00	M	60.0	69.0	4.0	7.5
GSTM6050P-220□	22.00	M	140.0	170.0	2.5	5.5

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Inductance Tolerance : M = +/-20%
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 20%

* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.



Product Series Code	**GSTM**	Brand	GOTREND
File Version	GSTM-V1R2	Editor	Teddy
Established Date	2012.09.26	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Electrical Characteristics :

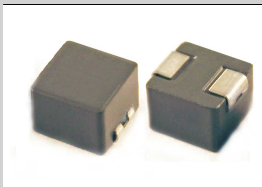
Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM1030P-R36□	0.36	M	1.3	1.6	23.0	40.0
GSTM1030P-R47□	0.47	M	2.1	2.5	20.0	33.0
GSTM1030P-R56□	0.56	M	2.6	3.0	16.0	24.0
GSTM1030P-1R0□	1.00	M	4.6	6.0	15.0	20.0
GSTM1030P-1R5□	1.50	M	6.5	7.5	13.0	20.0
GSTM1030P-2R2□	2.20	M	8.0	9.0	12.0	16.0
GSTM1030P-3R3□	3.30	M	14.5	16.0	9.0	14.0
GSTM1030P-4R7□	4.70	M	20.5	22.5	7.0	13.0
GSTM1030P-5R6□	5.60	M	28.0	32.5	7.0	12.0
GSTM1030P-6R8□	6.80	M	30.2	35.0	6.5	9.5
GSTM1030P-8R2□	8.20	M	42.0	48.0	6.0	8.5
GSTM1030P-100□	10.00	M	50.0	55.0	5.0	8.0

Electrical Characteristics :

Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM1040P-R22□	0.22	M	0.80	1.00	35.00	60.0
GSTM1040P-R36□	0.36	M	1.05	1.20	31.00	60.0
GSTM1040P-R39□	0.39	M	1.10	1.30	30.00	60.0
GSTM1040P-R45□	0.45	M	1.30	1.50	29.00	45.0
GSTM1040P-R56□	0.56	M	1.60	1.80	25.00	40.0
GSTM1040P-1R0□	1.00	M	3.00	3.30	18.00	36.0
GSTM1040P-1R5□	1.50	M	4.00	4.60	16.00	33.0
GSTM1040P-2R2□	2.20	M	6.50	7.00	12.00	27.0
GSTM1040P-3R3□	3.30	M	10.80	11.80	11.00	20.0
GSTM1040P-4R7□	4.70	M	15.00	15.50	10.00	17.0
GSTM1040P-6R8□	6.80	M	17.50	23.30	8.50	13.5
GSTM1040P-100□	10.00	M	27.00	30.00	7.50	12.0
GSTM1040P-150□	15.00	M	40.00	45.00	6.25	10.0
GSTM1040P-330□	33.00	M	92.00	112.00	3.50	5.0

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Inductance Tolerance : M = +/-20%
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 20%

* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.



Product Series Code	**GSTM**	Brand	GOTREND
File Version	GSTM-V1R2	Editor	Teddy
Established Date	2012.09.26	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Electrical Characteristics :

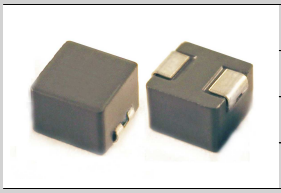
Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM1238P-1R0□	1.00	M	3.3	3.5	24.0	40.0
GSTM1238P-1R5□	1.50	M	5.1	5.5	19.0	35.0
GSTM1238P-1R8□	1.80	M	6.0	7.0	16.5	30.0
GSTM1238P-2R2□	2.20	M	7.2	8.0	16.0	29.0
GSTM1238P-3R3□	3.30	M	11.0	12.0	12.0	27.0
GSTM1238P-4R7□	4.70	M	14.3	15.0	10.0	24.0
GSTM1238P-5R6□	5.60	M	17.1	18.0	9.5	19.0
GSTM1238P-6R8□	6.80	M	19.8	22.0	9.0	18.0
GSTM1238P-8R2□	8.20	M	24.8	28.0	8.5	16.0
GSTM1238P-100□	10.00	M	30.4	34.0	7.0	14.0

Electrical Characteristics :

Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM1250P-R33□	0.33	M	0.70	0.90	42.0	80.0
GSTM1250P-R47□	0.47	M	0.86	1.10	38.0	65.0
GSTM1250P-R56□	0.56	M	1.00	1.50	36.0	55.0
GSTM1250P-R68□	0.68	M	1.40	1.70	34.0	54.0
GSTM1250P-1R0□	1.00	M	1.85	2.50	29.0	50.0
GSTM1250P-1R2□	1.20	M	2.50	3.00	28.0	49.0
GSTM1250P-1R5□	1.50	M	2.80	3.30	27.0	48.0
GSTM1250P-1R8□	1.80	M	4.00	4.90	21.0	40.0
GSTM1250P-2R2□	2.20	M	4.20	5.50	20.0	32.0
GSTM1250P-3R3□	3.30	M	6.80	9.20	15.0	32.0
GSTM1250P-4R7□	4.70	M	11.40	15.00	12.0	27.0
GSTM1250P-5R6□	5.60	M	12.30	16.50	11.5	22.0
GSTM1250P-6R8□	6.80	M	14.50	18.50	11.0	21.0
GSTM1250P-8R2□	8.20	M	16.80	22.50	9.5	18.0
GSTM1250P-100□	10.00	M	21.40	25.50	9.0	16.0

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Inductance Tolerance : M = +/-20%
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 20%

* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.



Product Series Code	**GSTM**	Brand	GOTREND
File Version	GSTM-V1R2	Editor	Teddy
Established Date	2012.09.26	Description	High Current Inductor
Latest Edit Date	2013.02.23		

Electrical Characteristics :

Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat 1 (Amp) Typ.	Isat 2 (Amp) Typ.
GSTM1260P-6R8□	6.8	M	12.0	13.8	15.0	19.0	25.0
GSTM1260P-100□	10.0	M	18.0	20.7	11.0	15.5	21.0
GSTM1260P-120□	12.0	M	20.0	23.0	9.5	13.5	18.0
GSTM1260P-150□	15.0	M	25.0	29.0	9.0	13.0	16.0
GSTM1260P-180□	18.0	M	30.0	35.0	8.5	12.0	15.0
GSTM1260P-220□	22.0	M	34.0	39.5	8.0	11.0	14.0
GSTM1260P-270□	27.0	M	49.0	56.0	7.0	9.0	13.0
GSTM1260P-330□	33.0	M	65.0	75.0	6.0	8.0	12.0
GSTM1260P-470□	47.0	M	80.0	90.0	5.5	7.0	11.0
GSTM1260P-680□	68.0	M	120.0	140.0	5.0	6.0	9.0
GSTM1260P-101□	100.0	M	180.0	200.0	4.0	5.0	8.0
GSTM1260P-121□	120.0	M	210.0	235.0	3.5	4.5	7.0
GSTM1260P-151□	150.0	M	300.0	350.0	3.0	4.0	6.0

Electrical Characteristics :

Part No.	Inductance (uH)	Inductance Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Irms (Amp) Typ.	Isat (Amp) Typ.
GSTM1265P-R40□	0.40	M	0.70	1.00	44.0	64.0
GSTM1265P-R47□	0.47	M	0.90	1.20	41.0	63.0
GSTM1265P-R50□	0.50	M	0.92	1.25	40.0	60.0
GSTM1265P-R82□	0.82	M	1.50	1.90	33.0	50.0
GSTM1265P-1R5□	1.50	M	2.50	3.00	27.0	45.0
GSTM1265P-2R2□	2.20	M	3.80	4.20	22.0	37.0
GSTM1265P-3R3□	3.30	M	5.70	6.80	18.0	30.0
GSTM1265P-4R7□	4.70	M	7.00	8.40	13.5	28.0
GSTM1265P-6R8□	6.80	M	9.50	11.50	11.5	18.0
GSTM1265P-8R2□	8.20	M	12.00	15.50	10.5	16.0
GSTM1265P-101□	100.00	M	180.00	200.00	2.5	3.5

* Test Condition @100KHz , 1.0Vrms , 25°C Ambient
* Inductance Tolerance : M = +/-20%
* Irms : Rated Current Loading when temperature rise approximately 40°C
* Isat : Saturated Current measured at the point of L drop approximately 20%

* The parts final operating temperature (Ambient+The parts temperature rise) should not exceed 125°C if under worst case of operating conditions.
  Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
* All test data is referenced to 25° C Ambient.

Product Series Code	**GMAR**	Brand	GOTREND
File Version	GMAR-V4R0	Editor	Teddy
Established Date	2009.07.16	Description	Dip Choke High-Current
Latest Edit Date	2013.02.23		

Features & Application:

* High-Current, Low DCR, 0.22uH/56Amp ~ 33uH/8Amp
* Magnetic Shielded for excellent EMI effect
* No air-space and large energy storage capability
* Through-hole high-current
* PWM circuit inductance & isolation
* M/B, NB, IPC .... various switching power application

Product Structure

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Expression Example:

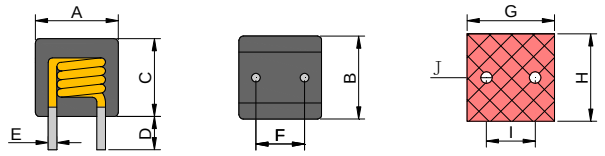
GMAR 151311 P - 0R9 M

1 2 3 4 5

1. Product Code : GMAR
2. Size Code : 151311 = [L] 15 X [W] 13 X [H] 11
3. P=Pb Free < 1000ppm
4. [L] Value : Inductance Ex.: 0R9=0.9uH
5. [L] Tolerance: M=+/-20%,N=+/-30%

DIMENSION : [mm]

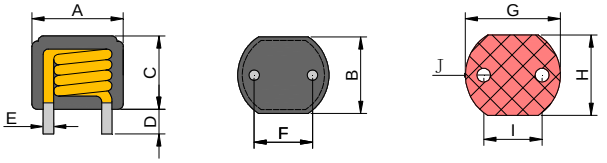
Side View | Bottom View | Recommend Pad Layout



TYPE	A+/-0.5	B+/-0.5	C [Max.]	D+/0.5	E+/-0.2	F+/-0.4	G [Ref.]	H [Ref.]	I [Ref.]	J[Ref.]
GMAR080808	8.50	8.50	8.00	3.40	By P/N	5.00	9.00	9.00	5.00	By P/N

DIMENSION : [mm]

Side View | Bottom View | Recommend Pad Layout



TYPE	A+/-0.5	B+/-0.5	C [Max.]	D+/0.5	E+/-0.2	F+/-0.5	G [Ref.]	H [Ref.]	I [Ref.]	J [Ref.]
GMAR121007	12.50	10.50	7.50	3.40	By P/N	8.00	13.00	11.00	8.00	By P/N
GMAR121008	12.50	10.50	8.60	3.40	By P/N	8.00	13.00	11.00	8.00	By P/N
GMAR121010	12.50	10.50	10.00	3.40	By P/N	8.00	13.00	11.00	8.00	By P/N
GMAR121011	12.50	10.50	11.00	3.40	By P/N	8.00	13.00	11.00	8.00	By P/N
GMAR151309	15.50	13.00	9.50	3.40	By P/N	10.00	16.50	14.00	10.00	By P/N
GMAR151311	15.50	13.00	11.50	3.40	By P/N	10.00	16.50	14.00	10.00	By P/N

Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:

Ambient Temp : 20+/-15°C

Relative Humidity : 65+/-20%

If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:75+/-10%

Operating & Storage Condition:

OPERATING TEMP:-25~+125°C

STORAGE TEMP:-25~+125°C
STORAGE LIFE TIME: 12 MONTH @25°C , RH 40~65%

Wave Solder Condition:

Pre-heat TEMP. 1 : 110 +/- 5 °C
Pre-heat TEMP. 2 : 90°C~145°C
Peak TEMP. : 260°C ~ 265°C / 3 ~ 6 sec.

Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Product Series Code	**GMAR**	Brand	GOTREND
File Version	GMAR-V4R0	Editor	Teddy
Established Date	2009.07.16	Description	Dip Choke High-Current
Latest Edit Date	2013.02.23		

STANDARD SPEC LIST...

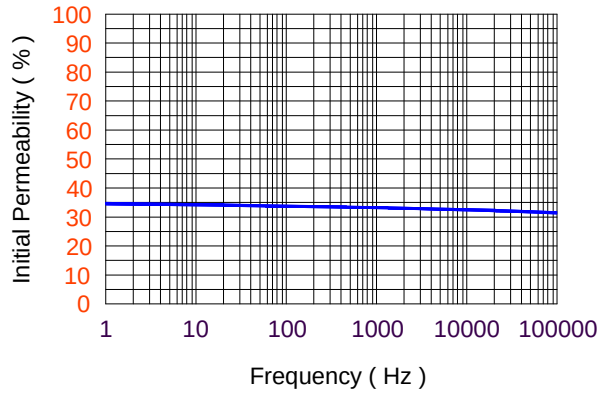
PART NO.	L (uH) @200KHz , 0.1V , 0Amp [± 20%]	Isat / Irms (Amp) Current Condition [Max.]	DCR (m Ohm) [Max.] / [Typ.]	E (mm) [± 0.2]	J (mm) [Ref.]
GMAR080808P-R10M	0.10	50.0 / 29.0	1.10 / 0.90	0.90	1.20
GMAR080808P-R33M	0.33	38.0 / 24.5	1.45 / 1.37	0.90	1.20
GMAR080808P-R36M	0.36	30.0 / 24.5	1.45 / 1.37	0.90	1.20
GMAR080808P-R47M	0.47	30.0 / 19.0	2.40 / 1.93	0.90	1.20
GMAR080808P-R56M	0.56	28.0 / 19.0	2.40 / 1.93	0.90	1.20
GMAR080808P-R68M	0.68	25.0 / 15.5	3.60 / 2.96	0.80	1.10
GMAR080808P-R80M	0.80	23.0 / 15.4	4.10 / 3.49	0.80	1.10
GMAR080808P-1R0M	1.00	21.0 / 14.3	4.10 / 3.49	0.80	1.10
GMAR080808P-1R2M	1.20	21.0 / 14.6	4.10 / 3.50	0.80	1.10
GMAR080808P-1R5M	1.50	18.0 / 10.1	7.20 / 5.83	0.70	1.10
GMAR080808P-2R2M	2.20	16.0 / 10.0	9.00 / 7.46	0.70	1.10
GMAR080808P-2R8M	2.80	15.0 / 9.5	10.20 / 8.54	0.70	1.10
GMAR080808P-3R3M	3.30	14.0 / 9.2	11.00 / 8.98	0.70	1.10
GMAR080808P-4R7M	4.70	12.0 / 8.0	15.00 / 12.04	0.70	1.10
GMAR121007P-R22M	0.22	56.0 / 38.0	0.60 / 0.50	1.40	1.90
GMAR121008P-R33M	0.33	48.0 / 33.0	0.80 / 0.70	1.40	1.90
GMAR121008P-R39M	0.39	45.0 / 33.0	0.80 / 0.70	1.40	1.90
GMAR121010P-R47M	0.47	40.0 / 30.0	1.00 / 0.85	1.50	1.80
GMAR121010P-R56M	0.56	40.0 / 30.0	1.00 / 0.85	1.50	1.80
GMAR121010P-R68M	0.68	40.0 / 30.0	1.00 / 0.85	1.50	1.80
GMAR121010P-R80M	0.80	36.0 / 26.0	1.50 / 1.26	1.40	1.90
GMAR121010P-1R0M	1.00	32.0 / 21.0	2.10 / 1.75	1.20	1.70
GMAR121010P-1R5M	1.50	30.0 / 16.0	3.50 / 3.00	1.00	1.50
GMAR121010P-2R2M	2.20	24.0 / 13.6	5.00 / 4.30	1.00	1.50
GMAR121010P-2R8M	2.80	20.0 / 12.3	6.40 / 5.60	0.90	1.40
GMAR121010P-3R3M	3.30	16.0 / 11.2	8.10 / 6.80	0.80	1.30
GMAR121010P-4R7M	4.70	15.0 / 10.0	10.00 / 8.80	0.80	1.30
GMAR121011P-8R2M	8.20	10.0 / 8.5	12.00 / 14.00	0.80	1.30
GMAR151309P-R39M	0.39	54.0 / 37.0	0.70 / 0.60	1.70	2.30
GMAR151309P-R47M	0.47	50.0 / 36.0	0.75 / 0.65	1.70	2.30
GMAR151309P-R56M	0.56	50.0 / 36.0	0.75 / 0.65	1.70	2.30
GMAR151311P-R80M	0.80	45.0 / 32.0	1.00 / 0.86	1.70	2.30
GMAR151311P-1R0M	1.00	40.0 / 27.0	1.32 / 1.15	1.50	2.10
GMAR151311P-1R2M	1.20	40.0 / 26.0	1.36 / 1.20	1.50	2.10
GMAR151311P-1R5M	1.50	35.0 / 23.5	1.72 / 1.50	1.50	2.10
GMAR151311P-2R2M	2.20	30.0 / 20.0	2.50 / 2.20	1.30	1.90
GMAR151311P-4R7M	4.70	24.0 / 12.0	7.20 / 6.00	1.00	1.50
GMAR151311P-6R8M	6.80	16.0 / 10.0	10.00 / 8.50	1.00	1.50
GMAR151311P-100M	10.00	12.0 / 9.0	11.20 / 9.80	1.00	1.50
GMAR151311P-150M	15.00	10.0 / 6.8	21.00 / 17.00	0.80	1.30
GMAR151311P-220M	22.00	10.0 / 6.5	24.00 / 19.15	0.80	1.30
GMAR151311P-330M	33.00	8.0 / 5.0	42.00 / 36.00	0.65	1.10

* Test Condition@200KHz,0.1Vrms, 25°C Ambient
* Isat=Current loading caused L value drop approximately 20%
* Irms=Current loading caused the parts temperature rise about 40°C

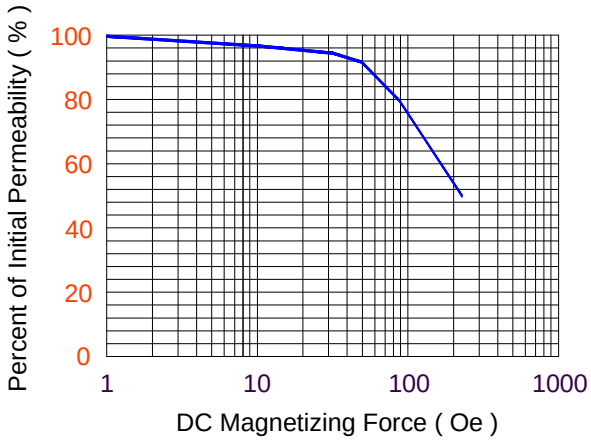
Product Series Code	**GMAR**	Brand	GOTREND
File Version	GMAR-V4R0	Editor	Teddy
Established Date	2009.07.16	Description	Dip Choke High-Current
Latest Edit Date	2013.02.23		

Material Character Curve:

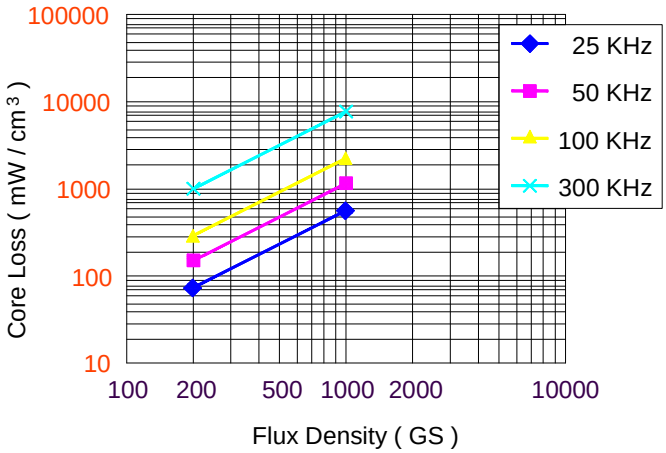
Initial permeability VS Frequency



Percent of Initial Permeability VS DC Magnetizing Force



Core Loss VS Flux Density



Product Series Code	**GMAT**	Brand	GOTREND
File Version	GMAT-V3R4	Editor	Teddy
Established Date	2006.06.14	Description	Dip Choke High Current
Latest Edit Date	2013.02.23		

Features & Application :

* High-Current , Low DCR , 0.3uH / 50Amp ~ 1.5uH / 38Amp
* Magnetic Shielded for excellent EMI effect
* No air-space and large energy storage capability
* Through-hole high-current
* PWM circuit inductance & isolation
* M/B, NB, IPC .... various switching power application

Product Structure :

SMD	DIP	Shield	Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

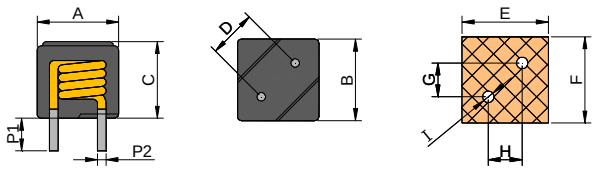
Part No Example :

GMAT	131210	P	-	R80	M
1	2	3		4	5

1. Product Code : GMAT
2. Size Code : 131210 = 13. x 12 x 10
3. [L] Value : Inductance R80 = 0.8uH
4. P = Pb Free < 1000 ppm
5. [L] Tolerance : M = +/-20% , N = +/-30%

DIMENSION : [mm]

Side View | Bottom View | Recommend Pad Layout



TYPE	A+/-0.5	B+/-0.5	C [Max.]	D+/-0.5	E [Ref.]	F [Ref.]	G [Ref.]	H [Ref.]	I [Ref.]	P1+/-0.5	P2+/-0.2
GMAT121210	11.50	11.50	10.00	By P/N	12.50	12.50	By P/N	By P/N	By P/N	3.40	By P/N
GMAT121211	11.50	11.50	10.50	By P/N	12.50	12.50	By P/N	By P/N	By P/N	3.40	By P/N
GMAT131210	13.00	12.00	10.00	By P/N	14.00	13.00	By P/N	By P/N	By P/N	3.40	By P/N
GMAT131211	13.00	12.00	11.00	By P/N	14.00	13.00	By P/N	By P/N	By P/N	3.40	By P/N

Test Equipment :

* HP4284A , HP42841A - L , IDC , Q , RDC
* HP8753D NETWORK ANALYZER - SRF

Standard Atmospheric Conditions :
Ambient Temp : 20 +/- 15°C
Relative Humidity : 65 +/- 20%
If there may be any doubt on the result,
measurement shall be made within the following limits :
Ambient Temp : 25 +/- 5°C
Relative Humidity : 75 +/- 10%

Wave Solder Condition :

Pre-heat TEMP. 1 : 110 +/- 5 °C
Pre-heat TEMP. 2 : 90 °C ~ 145 °C
Peak TEMP. : 260 °C ~ 265 °C / 3 ~ 6 sec.

Operating & Storage Condition :

OPERATING TEMP : -25 ~ +125°C

STORAGE TEMP : -25 ~ +125°C
STORAGE LIFE TIME : 12 MONTH @25°C , RH 40~65%

Attention & Caution :

Please avoid following matters :
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Product Series Code	**GMAT**	Brand	GOTREND
File Version	GMAT-V3R4	Editor	Teddy
Established Date	2006.06.14	Description	Dip Choke High Current
Latest Edit Date	2013.02.23		

STANDARD SPEC LIST...

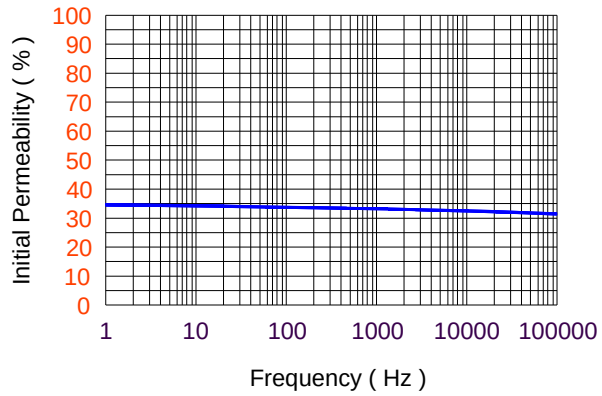
PART NO.	L @200KHz,0.1V,0Amp uH ± 20%	Isat / Irms Current Condition (max) Amp	DCR m Ohm [Max] / [Typ]	D ± 0.5mm	G Ref.	H Ref.	I Ref.	P2 ± 0.2mm
GMAT121210P-R30M	0.30	50 / 35	0 85 / 0.75	8.50	5.70	6.30	2.00	1.50
GMAT121210P-R47M	0.47	50 / 32	1.00 / 0.85	8.50	5.70	6.30	2.00	1.50
GMAT121210P-R60M	0.60	50 / 32	1.00 / 0.85	8.50	5.70	6.30	2.00	1.50
GMAT121210P-R80M	0.80	40 / 27	1.40 / 1.20	8.50	5.70	6.30	2.00	1.50
GMAT121210P-1R0M	1.00	36 / 24	1.80 / 1.60	9.00	6.40	6.30	1.70	1.20
GMAT121210P-1R5M	1.50	32 / 21	2.30 / 2.00	9.00	6.40	6.30	1.70	1.20
GMAT121211P-1R8M	1.8	35 / 15	4.20 / 3.45	9.30	6.60	6.60	1.50	1.00
GMAT131210P-R22M	0.22	60 / 45	0 45 / 0.40	10.00	6.60	7.60	2.20	1.70
GMAT131210P-R33M	0.33	56 / 40	0 60 / 0.52	10.00	6.60	7.60	2.20	1.70
GMAT131210P-R39M	0.39	55 / 39	0 65 / 0.56	10.00	6.60	7.60	2.20	1.70
GMAT131210P-R47M	0.47	54 / 38	0.68 / 0.60	10.00	6.60	7.60	2.20	1.70
GMAT131210P-R56M	0.56	52 / 38	0.68 / 0.60	10.00	6.60	7.60	2.20	1.70
GMAT131210P-R68M	0.68	50 / 35	0.85 / 0.75	10.00	6.60	7.60	2.20	1.70
GMAT131210P-R80M	0.80	48 / 33	0.90 / 0.80	10.00	6.60	7.60	2.20	1.70
GMAT131210P-1R0M	1.00	40 / 28	1.25 / 1.10	10.00	6.60	7.60	2.00	1.50
GMAT131211P-1R5M	1.50	38 / 25	1.65 / 1.45	10.00	6.60	7.60	2.00	1.50

* Test Condition @200KHz , 0.1Vrms , 25ºC Ambient
* Isat = Current loading caused L value drop approximately 20%
* Irms = Current loading caused the parts temperature rise about 40ºC

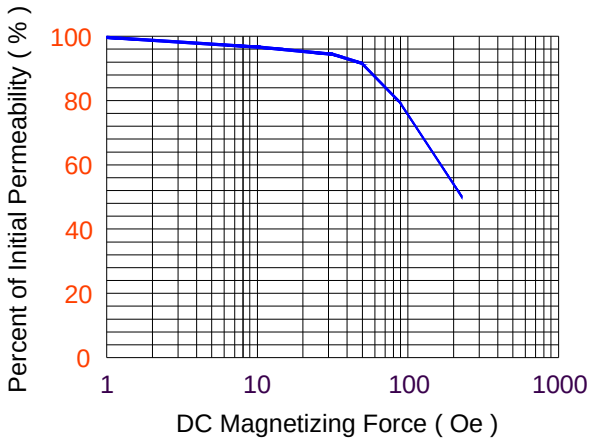
Product Series Code	**GMAT**	Brand	GOTREND
File Version	GMAT-V3R4	Editor	Teddy
Established Date	2006.06.14	Description	Dip Choke High Current
Latest Edit Date	2013.02.23		

Material Character Curve:

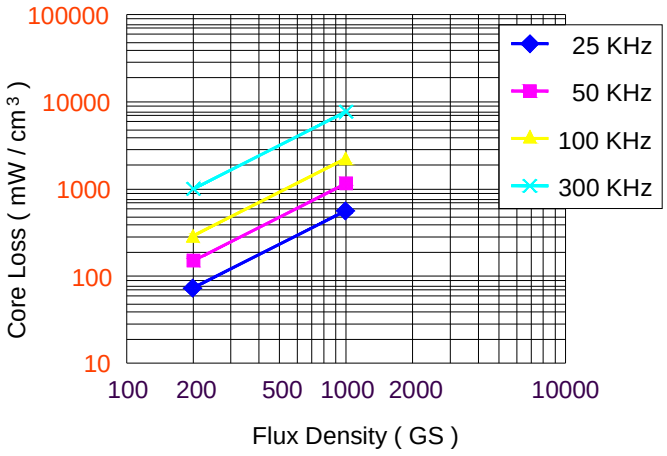
Initial permeability VS Frequency



Percent of Initial Permeability VS DC Magnetizing Force



Core Loss VS Flux Density



Product Series Code	**GMBT**	Brand	GOTREND
File Version	GMBT-V2R2	Editor	Teddy
Established Date	2009.05.08	Description	Dip Choke High-Current
Latest Edit Date	2013.02.23		

Features & Application:

* High-Current, Low DCR,
* Magnetic Shielded for excellent EMI effect
* No air-space and large energy storage capability
* Through-hole high-current
* PWM circuit inductance & isolation
* M/B, NB, IPC .... various switching power application

Product Structure

SMD ▼ DIP ▼ Shield / Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

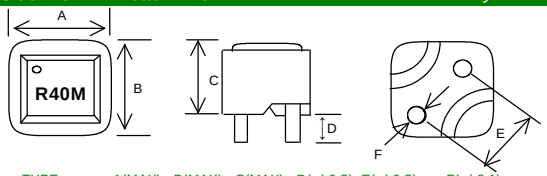
Part No Expression Example:

GMBT	121208	P - R40	M
1	2	3 4	5

1. Product Code : GMBT
2. Size Code : 121208=12 X 12 X 8
3. P=Pb Free < 1000ppm
4. [L] Value : Inductance Ex.: R40M=0.4uH
5. [L] Tolerance: M=+/-20%,N=+/-30%

DIMENSION: [Unit:mm]

Side View / Bottom View / Recommended Pad Layout



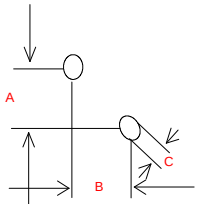
TYPE	A(MAX)	B(MAX)	C(MAX)	D(+/-0.5)	E(+/-0.5)	F(+/-0.1)
GMBT080808	8.8	8.8	8.0	3.5	6.3	By each P/N
GMBT101010	11.0	11.0	10.0	3.5	7.5	By each P/N
GMBT121208	12.0	12.0	8.0	3.5	8.5	By each P/N
GMBT121209	12.0	12.0	9.0	3.5	8.5	By each P/N
GMBT121210	12.0	12.0	10.0	3.5	8.5	By each P/N
GMBT121212	12.0	12.0	12.0	3.5	8.5	By each P/N
GMBT131211	13.0	13.0	11.0	3.5	10.0	By each P/N

[C] DIMENSION : GMBT080808P-1R2M~2R2M = 8.5 mm Max. ; 3R3M = 9.0 mm Max.
GMBT131211P-3R3M : 12.0 mm Max.

Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
Standard Atmospheric Conditions:
Ambient Temp:25+/-15ºC
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5ºC
Relative Humidity:75+/-10%

RECOMMEND LAYOUT :



Type	A(Ref)	B(Ref)	C(Ref)
080808	4.5	4.4	By each P/N
101010	4.5	6.0	By each P/N
121208	5.7	6.3	By each P/N
121209	5.7	6.3	By each P/N
121210	5.7	6.3	By each P/N
121212	5.7	6.3	By each P/N
131211	6.5	7.6	By each P/N

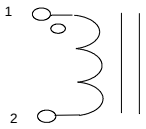
Operating & Storage Condition:

OPERATING TEMP:-25~+125ºC

STORAGE TEMP:-25~+125ºC

STORAGE LIFE TIME: 12 MONTH @25ºC , RH 40~65%

SCHEMATIC:



Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Wave Solder Condition:

Pre-heat TEMP. 1 : 110 +/- 5 ºC
Pre-heat TEMP. 2 : 90 ºC ~ 145 ºC
Peak TEMP. : 260 ºC ~ 265 ºC / 3 ~ 6 sec.

Product Series Code	**GMBT**	Brand	GOTREND
File Version	GMBT-V2R2	Editor	Teddy
Established Date	2009.05.08	Description	Dip Choke High-Current
Latest Edit Date	2013.02.23		

PART NO.	L (uH) ± 20% @100KHz,1V,0Amp	Isat (Amp)	Irms (Amp)	DCR (m Ohm)	Dimension (mm)	Layout (mm)
		(TYP.)	(TYP.)	(TYP. / MAX.)	F (+/-0.1)	C (REF.)
GMBT080808P-R20M	0.20	35	25	1.80 / 2.00	0.70	1.10
GMBT080808P-R30M	0.30	30	22	2.40 / 2.80	0.70	1.10
GMBT080808P-R36M	0.36	28	22	2.40 / 2.80	0.70	1.10
GMBT080808P-R39M	0.39	26	22	2.40 / 2.80	0.70	1.10
GMBT080808P-R47M	0.47	24	20	3.00 / 3.60	0.70	1.10
GMBT080808P-R60M	0.60	23	20	3.00 / 3.60	0.70	1.10
GMBT080808P-R68M	0.68	22	20	3.00 / 3.60	0.70	1.10
GMBT080808P-R80M	0.80	20	18	3.60 / 4.00	0.70	1.10
GMBT080808P-1R0M	1.00	19	18	3.60 / 4.00	0.70	1.10
GMBT080808P-1R2M	1.20	17	17	4.00 / 4.75	0.70	1.10
GMBT080808P-1R5M	1.50	16	16	5.00 / 5.50	0.70	1.10
GMBT080808P-1R8M	1.80	15	16	5.00 / 5.50	0.70	1.10
GMBT080808P-2R2M	2.20	14	14	5.60 / 6.20	0.70	1.10
GMBT080808P-3R3M	3.30	12	12	6.30 / 7.00	0.70	1.10
GMBT101010P-R20M	0.20	60	50	0.45 / 0.60	1.40	1.90
GMBT101010P-R25M	0.25	60	40	0.65 / 0.75	1.40	1.90
GMBT101010P-R30M	0.30	60	40	0.65 / 0.75	1.40	1.90
GMBT101010P-R33M	0.33	60	40	0.65 / 0.75	1.40	1.90
GMBT101010P-R36M	0.36	50	40	0.65 / 0.75	1.40	1.90
GMBT101010P-R39M	0.39	50	40	0.65 / 0.75	1.40	1.90
GMBT101010P-R47M	0.47	50	35	0.90 / 1.10	1.40	1.90
GMBT101010P-R60M	0.60	50	35	0.90 / 1.10	1.40	1.90
GMBT101010P-R80M	0.80	40	33	1.10 / 1.30	1.40	1.90
GMBT101010P-1R0M	1.00	40	27	1.55 / 1.80	1.20	1.70
GMBT101010P-1R5M	1.50	30	21	2.70 / 3.00	1.00	1.50
GMBT101010P-1R8M	1.80	30	21	2.70 / 3.00	1.00	1.50
GMBT101010P-2R2M	2.20	30	18	3.70 / 4.00	1.00	1.50
GMBT121208P-R25M	0.25	80	45	0.70 / 0.80	1.50	2.00
GMBT121208P-R30M	0.30	80	45	0.70 / 0.80	1.50	2.00
GMBT121208P-R33M	0.33	70	45	0.70 / 0.80	1.50	2.00
GMBT121208P-R36M	0.36	60	45	0.70 / 0.80	1.50	2.00
GMBT121208P-R40M	0.40	65	38	0.75 / 0.90	1.50	2.00
GMBT121209P-R47M	0.47	60	40	0.90 / 1.00	1.50	2.00
GMBT121209P-R50M	0.50	60	40	0.90 / 1.00	1.50	2.00
GMBT121209P-R56M	0.56	50	40	0.90 / 1.00	1.50	2.00
GMBT121209P-R60M	0.60	50	40	0.90 / 1.00	1.50	2.00
GMBT121209P-R68M	0.68	40	35	0.90 / 1.00	1.40	1.90
GMBT121210P-R80M	0.80	45	25	1.30 / 1.60	1.40	1.90
GMBT121210P-1R0M	1.00	45	25	1.40 / 1.80	1.40	1.90
GMBT121210P-1R2M	1.20	33	23	1.70 / 2.00	1.20	1.70
GMBT121210P-1R5M	1.50	32	21	2.20 / 2.50	1.20	1.70
GMBT121210P-2R0M	2.00	27	15	3.30 / 4.00	1.00	1.50
GMBT121210P-2R2M	2.20	40	15	4.50 / 5.00	1.00	1.50
GMBT121210P-2R5M	2.50	30	15	4.50 / 5.00	1.00	1.50
GMBT121212P-4R7M	4.70	20	10	5.50 / 6.00	1.00	1.50

* Test Condition@100KHz,1Vrms, 25°C Ambient

* Isat=Current loading caused L value drop approximately 20%

* Irms=Current loading caused the parts temperature rise about 40°C

Product Series Code	**GMBT**	Brand	GOTREND
File Version	GMBT-V2R2	Editor	Teddy
Established Date	2009.05.08	Description	Dip Choke High-Current
Latest Edit Date	2013.02.23		

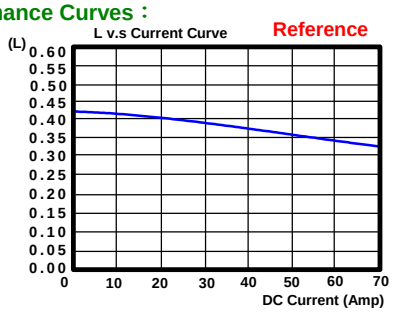
PART NO.	L (uH) ± 20% @100KHz,1V,0Amp	Isat (Amp)	Irms (Amp)	DCR (m Ohm)	Dimension (mm)	Layout (mm)
		(TYP.)	(TYP.)	(TYP. / MAX.)	F (+/-0.1)	C (REF.)
GMBT131211P-R22M	0.22	60	45	0.40 / 0.55	1.70	2.20
GMBT131211P-R30M	0.30	60	40	0.55 / 0.70	1.70	2.20
GMBT131211P-R33M	0.33	60	40	0.55 / 0.70	1.70	2.20
GMBT131211P-R39M	0.39	60	40	0.55 / 0.70	1.70	2.20
GMBT131211P-R47M	0.47	60	40	0.70 / 0.80	1.70	2.20
GMBT131211P-R50M	0.50	60	40	0.70 / 0.80	1.70	2.20
GMBT131211P-R56M	0.56	60	40	0.70 / 0.80	1.70	2.20
GMBT131211P-R60M	0.60	60	40	0.70 / 0.80	1.70	2.20
GMBT131211P-R68M	0.68	50	40	0.70 / 0.80	1.70	2.20
GMBT131211P-R80M	0.80	50	40	0.70 / 0.85	1.70	2.20
GMBT131211P-1R0M	1.00	50	30	1.20 / 1.35	1.50	2.00
GMBT131211P-1R2M	1.20	40	30	1.20 / 1.50	1.50	2.00
GMBT131211P-1R5M	1.50	40	30	1.50 / 1.70	1.40	1.90
GMBT131211P-2R0M	2.00	25	17	2.90 / 3.30	1.20	1.70
GMBT131211P-2R2M	2.20	25	17	2.90 / 3.30	1.20	1.70
GMBT131211P-3R3M	3.30	20	15	3.30 / 4.00	1.20	1.70

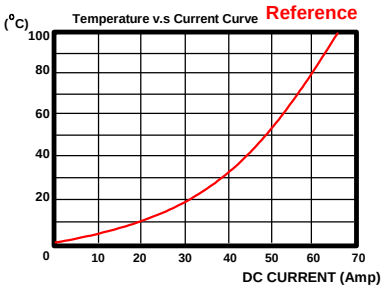
* Test Condition@100KHz,1Vrms, 25°C Ambient

* Isat=Current loading caused L value drop approximately 20%

* Irms=Current loading caused the parts temperature rise about 40°C

Performance Curves：

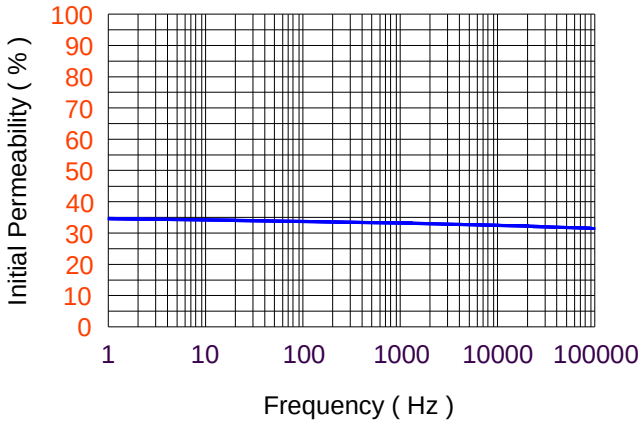




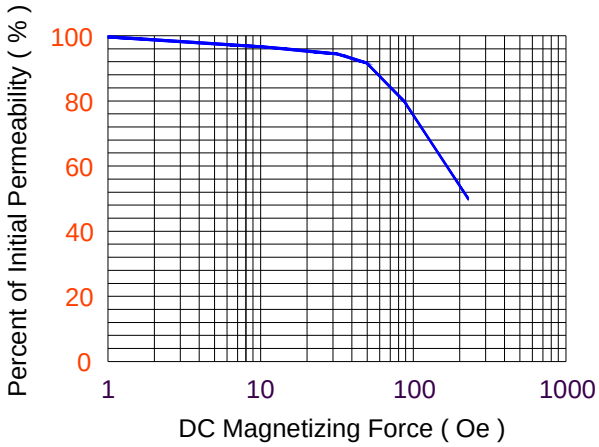
Product Series Code	**GMBT**	Brand	GOTREND
File Version	GMBT-V2R2	Editor	Teddy
Established Date	2009.05.08	Description	Dip Choke High-Current
Latest Edit Date	2013.02.23		

Material Character Curve:

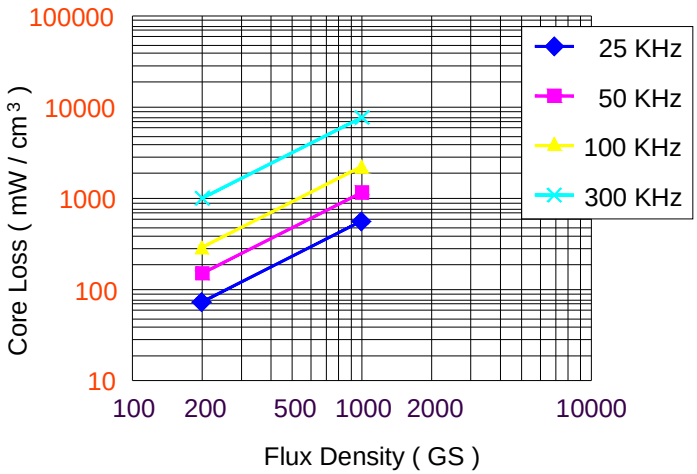
Initial permeability VS Frequency



Percent of Initial Permeability VS DC Magnetizing Force



Core Loss VS Flux Density



Product Series Code	**GAL**	Brand	GOTREND
File Version	GAL-V2R4	Editor	Teddy
Established Date	1997.06.23	Description	Axial Lead Inductor Choke
Latest Edit Date	2013.02.23		

Features & Application:

* Axial lead for through hole board facility
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* PC / IA / IPC / RF...etc.

Part No Example:

GAL	□	0204	P - 180	K
1	2	3	4	5	6

1.GOTREND TYPE : GAL
2.Form : N = Normal Form , F / U = F / U Forming
3.Dimension : Length-Width
4.P = Pb free < 1000ppm
5.Inductance : 180 = 18uH
6.Tolerance : K = 10% (J = 5% ; K =10% ; M = 20%)

Product Structure

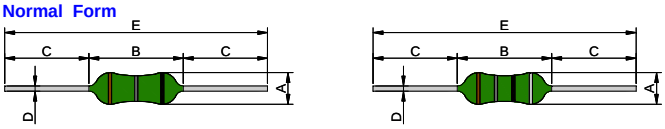
SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

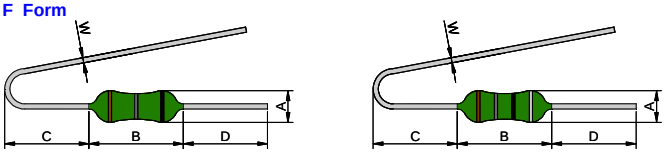
Dimensions [mm] :

Normal Form



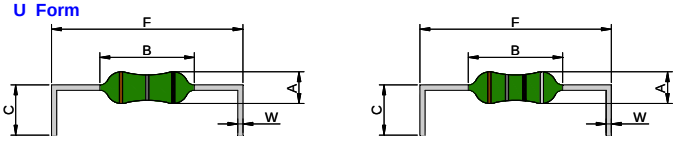
TYPE	A [max.]	B [max.]	C [+/-3.0]	D [+/-0.05]	E [+/-2.0]
0204	2.8	4.4	29.5	0.50	62.0
0307	3.0	7.0	28.0	0.50	62.0
0410	4.0	10.0	26.0	0.65	62.0
0512	5.0	12.0	24.5	0.65	62.0

F Form



TYPE	A [max.]	B [max.]	C [max.]	D [min.]	W [+/-0.05]
0204	2.8	4.4	6.0	3.6	0.50
0307	3.0	7.0	6.0	3.6	0.50
0410	4.0	10.0	6.0	4.0	0.65
0512	5.0	12.0	6.0	4.0	0.65

U Form



TYPE	A [max.]	B [max.]	C [+/-1.0]	F [+/-1.0]	W [+/-0.05]
0204	2.8	4.4	6.0	10.0	0.50
0307	3.0	7.0	6.0	10.0	0.50
0410	4.0	10.0	6.0	12.5	0.65
0512	5.0	12.0	6.0	12.5	0.65

Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15ºC
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5ºC
Relative Humidity:75+/-10%

Operating & Storage Condition:

OPERATING TEMP:-40~+85ºC

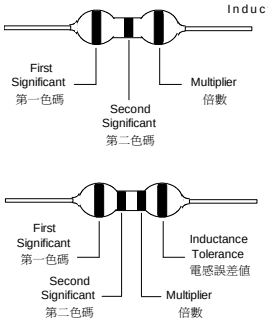
STORAGE TEMP:-40~+85ºC
STORAGE LIFE TIME: 12 MONTH @25ºC , RH 65%

Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Marking Expression:

色碼依下列算法計之.....
For inductance meanning:
[(1st dot x10)+2 nd dot]x10 3 rd dot=nH
for example:
GAL0204PS-220J Color Significant=紅 1st 紅 2nd 橙 3rd
Inductance= [(紅 2) x 10 + (紅 2)] x (橙)x1000)
=22x1000=22000nH
22000 ÷ 1000 = 22uH



Color Code 色碼		First Significant	Second Significant	Multiplier	Inductance Tolerance(%)
Black	黑	0	**0**	1	-
Brown	棕	1	**1**	10	-
Red	紅	2	**2**	100	-
Orange	橙	3	**3**	1000	-
Yellow	黃	4	**4**	-	-
Green	綠	5	**5**	-	-
Blue	藍	6	**6**	-	-
Violet	紫	7	**7**	-	-
Gray	灰	8	**8**	-	-
White	白	9	**9**	-	-
Black(M)	黑	-	-	-	+/-20
Gold(J)	金	-	-	0.1	+/-5
Silver(K)	銀	-	-	0.01	+/-10

Product Series Code	**GAL**	Brand	GOTREND
File Version	GAL-V2R4	Editor	Teddy
Established Date	1997.06.23	Description	Axial Lead Inductor Choke
Latest Edit Date	2013.02.23		

PART NO.	Inductance (μH)	Test Freq. (MHz)	Q Min.	SRF (MHz) Min.	DCR (Ohm) Max.	IDC (mA) Max.	COLOR CODE		
							1st	2nd	3rd
GAL□0204P-R10□	0.10	25.2	50	250.0	0.030	700	Bn	Bk	S
GAL□0204P-R12□	0.12	25.2	55	230.0	0.035	660	Bn	R	S
GAL□0204P-R15□	0.15	25.2	55	200.0	0.040	620	Bn	Gn	S
GAL□0204P-R18□	0.18	25.2	55	180.0	0.045	600	Bn	Gy	S
GAL□0204P-R22□	0.22	25.2	55	160.0	0.050	400	R	R	S
GAL□0204P-R27□	0.27	25.2	50	150.0	0.065	380	R	V	S
GAL□0204P-R33□	0.33	25.2	50	150.0	0.075	370	O	O	S
GAL□0204P-R39□	0.39	25.2	50	150.0	0.080	350	O	W	S
GAL□0204P-R47□	0.47	25.2	60	150.0	0.085	330	Y	V	S
GAL□0204P-R56□	0.56	25.2	60	150.0	0.090	320	Gn	Bu	S
GAL□0204P-R68□	0.68	25.2	50	120.0	0.100	310	Bu	Gy	S
GAL□0204P-R82□	0.82	25.2	50	110.0	0.150	290	Gy	R	S
GAL□0204P-1R0□	1.00	25.2	50	110.0	0.220	270	Bn	Bk	Gd
GAL□0204P-1R2□	1.20	7.96	40	100.0	0.300	260	Bn	R	Gd
GAL□0204P-1R5□	1.50	7.96	40	80.0	0.350	250	Bn	Gn	Gd
GAL□0204P-1R8□	1.80	7.96	40	65.0	0.450	240	Bn	Gy	Gd
GAL□0204P-2R2□	2.20	7.96	40	55.0	0.550	230	R	R	Gd
GAL□0204P-2R7□	2.70	7.96	40	50.0	0.600	220	R	V	Gd
GAL□0204P-3R3□	3.30	7.96	40	42.0	0.650	210	O	O	Gd
GAL□0204P-3R9□	3.90	7.96	45	38.0	0.850	200	O	W	Gd
GAL□0204P-4R7□	4.70	7.96	45	34.0	1.000	190	Y	V	Gd
GAL□0204P-5R6□	5.60	7.96	45	32.0	1.150	180	Gn	Bu	Gd
GAL□0204P-6R8□	6.80	7.96	40	30.0	1.200	175	Bu	Gy	Gd
GAL□0204P-8R2□	8.20	7.96	40	26.0	1.250	165	Gy	R	Gd
GAL□0204P-100□	10.00	7.96	40	24.0	1.500	160	Bn	Bk	Bk
GAL□0204P-120□	12.00	2.52	50	22.0	2.200	150	Bn	R	Bk
GAL□0204P-150□	15.00	2.52	50	20.0	2.500	145	Bn	Gn	Bk
GAL□0204P-180□	18.00	2.52	50	18.0	2.800	140	Bn	Gy	Bk
GAL□0204P-220□	22.00	2.52	50	17.0	3.000	130	R	R	Bk
GAL□0204P-270□	27.00	2.52	55	14.0	3.500	80	R	V	Bk
GAL□0204P-330□	33.00	2.52	55	14.0	3.800	76	O	O	Bk
GAL□0204P-390□	39.00	2.52	50	13.0	4.200	74	O	W	Bk
GAL□0204P-470□	47.00	2.52	50	12.0	5.800	70	Y	V	Bk
GAL□0204P-560□	56.00	2.52	50	11.0	6.400	68	Gn	Bu	Bk
GAL□0204P-680□	68.00	2.52	50	10.0	7.200	64	Bu	Gy	Bk
GAL□0204P-820□	82.00	2.52	50	9.5	8.500	46	Gy	R	Bk
GAL□0204P-101□	100.00	2.52	50	9.0	11.000	44	Bn	Bk	Bn
GAL□0204P-121□	120.00	0.796	40	6.5	13.000	42	Bn	R	Bn
GAL□0204P-151□	150.00	0.796	40	6.0	16.000	39	Bn	Gn	Bn
GAL□0204P-181□	180.00	0.796	40	5.2	18.000	37	Bn	Gy	Bn
GAL□0204P-221□	220.00	0.796	40	4.5	20.000	35	R	R	Bn
GAL□0204P-271□	270.00	0.796	30	3.5	29.000	28	R	V	Bn
GAL□0204P-331□	330.00	0.796	30	3.0	30.000	26	O	O	Bn
GAL□0204P-391□	390.00	0.796	30	2.7	32.000	25	O	W	Bn
GAL□0204P-471□	470.00	0.796	30	2.6	35.000	24	Y	V	Bn
GAL□0204P-561□	560.00	0.796	30	2.5	40.000	23	Gn	Bu	Bn
GAL□0204P-681□	680.00	0.796	30	2.2	42.000	22	Bu	Gy	Bn
GAL□0204P-821□	820.00	0.796	30	2.1	46.000	21	Gy	R	Bn
GAL□0204P-102□	1000.00	0.796	30	2.0	52.000	20	Bn	Bk	R

IDC : Base on temp rise up 40 deg.C max.
□=J = 5% , K = 10% , M = 20%

Product Series Code	**GAL**	Brand	GOTREND
File Version	GAL-V2R4	Editor	Teddy
Established Date	1997.06.23	Description	Axial Lead Inductor Choke
Latest Edit Date	2013.02.23		

PART NO.	Inductance (μH)	Test Freq. (MHz)	Q Min.	SRF (MHz) Min.	DCR (Ohm) Max.	IDC (mA) Max.	COLOR CODE			
							1st	2nd	3rd	4th
GAL□0307P-R10□	0.10	25.2	45	480.0	0.060	1400	Bn	Bk	S	Bk
GAL□0307P-R12□	0.12	25.2	45	450.0	0.060	1350	Bn	R	S	Bk
GAL□0307P-R15□	0.15	25.2	45	420.0	0.070	1270	Bn	Gn	S	Bk
GAL□0307P-R18□	0.18	25.2	45	400.0	0.070	1200	Bn	Gy	S	Bk
GAL□0307P-R22□	0.22	25.2	45	380.0	0.080	1150	R	R	S	Bk
GAL□0307P-R27□	0.27	25.2	45	360.0	0.090	1110	R	V	S	Bk
GAL□0307P-R33□	0.33	25.2	45	320.0	0.100	1110	O	O	S	Bk
GAL□0307P-R39□	0.39	25.2	45	310.0	0.120	1000	O	W	S	Bk
GAL□0307P-R47□	0.47	25.2	45	300.0	0.150	1000	Y	V	S	Bk
GAL□0307P-R56□	0.56	25.2	45	280.0	0.180	950	Gn	Bu	S	Bk
GAL□0307P-R68□	0.68	25.2	45	240.0	0.200	900	Bu	Gy	S	Bk
GAL□0307P-R82□	0.82	25.2	45	200.0	0.220	900	Gy	R	S	Bk
GAL□0307P-1R0□	1.00	25.2	45	180.0	0.250	815	Bn	Bk	Gd	S
GAL□0307P-1R2□	1.20	7.96	45	160.0	0.280	740	Bn	R	Gd	S
GAL□0307P-1R5□	1.50	7.96	45	140.0	0.300	700	Bn	Gn	Gd	S
GAL□0307P-1R8□	1.80	7.96	45	120.0	0.350	655	Bn	Gy	Gd	S
GAL□0307P-2R2□	2.20	7.96	45	110.0	0.400	630	R	R	Gd	S
GAL□0307P-2R7□	2.70	7.96	45	85.0	0.450	595	R	V	Gd	S
GAL□0307P-3R3□	3.30	7.96	45	74.0	0.500	575	O	O	Gd	S
GAL□0307P-3R9□	3.90	7.96	45	62.0	0.550	555	O	W	Gd	S
GAL□0307P-4R7□	4.70	7.96	45	48.0	0.600	530	Y	V	Gd	S
GAL□0307P-5R6□	5.60	7.96	45	35.0	0.650	500	Gn	Bu	Gd	S
GAL□0307P-6R8□	6.80	7.96	45	28.0	0.700	470	Bu	Gy	Gd	S
GAL□0307P-8R2□	8.20	7.96	45	20.0	0.800	425	Gy	R	Gd	S
GAL□0307P-100□	10.00	7.96	45	18.0	0.850	370	Bn	Bk	Bk	S
GAL□0307P-120□	12.00	2.52	45	16.0	0.900	350	Bn	R	Bk	S
GAL□0307P-150□	15.00	2.52	45	14.0	1.000	335	Bn	Gn	Bk	S
GAL□0307P-180□	18.00	2.52	45	12.0	1.200	315	Bn	Gy	Bk	S
GAL□0307P-220□	22.00	2.52	45	10.0	1.350	285	R	R	Bk	S
GAL□0307P-270□	27.00	2.52	45	9.0	1.800	270	R	V	Bk	S
GAL□0307P-330□	33.00	2.52	45	8.0	2.100	255	O	O	Bk	S
GAL□0307P-390□	39.00	2.52	45	7.5	2.300	240	O	W	Bk	S
GAL□0307P-470□	47.00	2.52	50	7.0	2.600	205	Y	V	Bk	S
GAL□0307P-560□	56.00	2.52	50	6.5	2.900	195	Gn	Bu	Bk	S
GAL□0307P-680□	68.00	2.52	50	6.0	3.200	185	Bu	Gy	Bk	S
GAL□0307P-820□	82.00	2.52	50	5.5	3.800	175	Gy	R	Bk	S
GAL□0307P-101□	100.00	2.52	50	5.0	4.200	165	Bn	Bk	Bn	S
GAL□0307P-121□	120.00	0.796	50	4.8	4.500	160	Bn	R	Bn	S
GAL□0307P-151□	150.00	0.796	50	4.5	5.000	150	Bn	Gn	Bn	S
GAL□0307P-181□	180.00	0.796	50	4.0	6.000	140	Bn	Gy	Bn	S
GAL□0307P-221□	220.00	0.796	50	3.5	7.000	130	R	R	Bn	S
GAL□0307P-271□	270.00	0.796	50	3.0	7.500	120	R	V	Bn	S
GAL□0307P-331□	330.00	0.796	50	2.8	8.000	100	O	O	Bn	S
GAL□0307P-391□	390.00	0.796	50	2.6	10.000	95	O	W	Bn	S
GAL□0307P-471□	470.00	0.796	50	2.4	13.000	90	Y	V	Bn	S
GAL□0307P-561□	560.00	0.796	50	2.0	15.000	85	Gn	Bu	Bn	S
GAL□0307P-681□	680.00	0.796	50	1.8	16.000	75	Bu	Gy	Bn	S
GAL□0307P-821□	820.00	0.796	50	1.6	23.000	65	Gy	R	Bn	S
GAL□0307P-102□	1000.00	0.796	50	1.4	26.000	60	Bn	Bk	R	S

IDC : Base on temp rise up 40 deg.C max.
□=J = 5% , K = 10% , M = 20%

Product Series Code	**GAL**	Brand	GOTREND
File Version	GAL-V2R4	Editor	Teddy
Established Date	1997.06.23	Description	Axial Lead Inductor Choke
Latest Edit Date	2013.02.23		

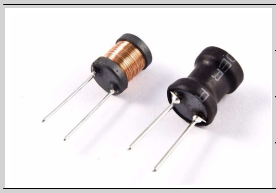
PART NO.	Inductance (μH)	Test Freq. (MHz)	Q Min.	SRF (MHz) Min.	DCR (Ohm) Max.	IDC (mA) Max.	COLOR CODE			
							1st	2nd	3rd	4th
GAL□0410P-R10□	0.10	25.2	50	480.0	0.06	1700	Bn	Bk	S	Bk
GAL□0410P-R12□	0.12	25.2	50	450.0	0.06	1640	Bn	R	S	Bk
GAL□0410P-R15□	0.15	25.2	50	420.0	0.07	1560	Bn	Gn	S	Bk
GAL□0410P-R18□	0.18	25.2	50	400.0	0.07	1480	Bn	Gy	S	Bk
GAL□0410P-R22□	0.22	25.2	50	380.0	0.08	1400	R	R	S	Bk
GAL□0410P-R27□	0.27	25.2	50	340.0	0.09	1320	R	V	S	Bk
GAL□0410P-R33□	0.33	25.2	50	300.0	0.10	1280	O	O	S	Bk
GAL□0410P-R39□	0.39	25.2	50	280.0	0.12	1200	O	W	S	Bk
GAL□0410P-R47□	0.47	25.2	50	250.0	0.13	1150	Y	V	S	Bk
GAL□0410P-R56□	0.56	25.2	50	230.0	0.14	1100	Gn	Bu	S	Bk
GAL□0410P-R68□	0.68	25.2	50	210.0	0.15	1030	Bu	Gy	S	Bk
GAL□0410P-R82□	0.82	25.2	50	172.0	0.16	980	Gy	R	S	Bk
GAL□0410P-1R0□	1.00	25.2	50	157.0	0.17	920	Bn	Bk	Gd	S
GAL□0410P-1R2□	1.20	7.96	50	144.0	0.18	880	Bn	R	Gd	S
GAL□0410P-1R5□	1.50	7.96	50	131.0	0.20	830	Bn	Gn	Gd	S
GAL□0410P-1R8□	1.80	7.96	50	121.0	0.22	790	Bn	Gy	Gd	S
GAL□0410P-2R2□	2.20	7.96	50	110.0	0.24	750	R	R	Gd	S
GAL□0410P-2R7□	2.70	7.96	60	100.0	0.25	720	R	V	Gd	S
GAL□0410P-3R3□	3.30	7.96	60	94.0	0.30	670	O	O	Gd	S
GAL□0410P-3R9□	3.90	7.96	60	86.0	0.35	640	O	W	Gd	S
GAL□0410P-4R7□	4.70	7.96	70	80.0	0.40	650	Y	V	Gd	S
GAL□0410P-5R6□	5.60	7.96	70	74.0	0.45	590	Gn	Bu	Gd	S
GAL□0410P-6R8□	6.80	7.96	70	68.0	0.50	550	Bu	Gy	Gd	S
GAL□0410P-8R2□	8.20	7.96	80	53.0	0.60	530	Gy	R	Gd	S
GAL□0410P-100□	10.00	7.96	80	40.0	0.65	500	Bn	Bk	Bk	S
GAL□0410P-120□	12.00	2.52	70	34.0	0.70	480	Bn	R	Bk	S
GAL□0410P-150□	15.00	2.52	70	20.0	0.75	460	Bn	Gn	Bk	S
GAL□0410P-180□	18.00	2.52	60	14.0	0.80	430	Bn	Gy	Bk	S
GAL□0410P-220□	22.00	2.52	60	9.9	0.90	410	R	R	Bk	S
GAL□0410P-270□	27.00	2.52	50	7.6	1.00	390	R	V	Bk	S
GAL□0410P-330□	33.00	2.52	50	6.5	1.10	370	O	O	Bk	S
GAL□0410P-390□	39.00	2.52	50	6.5	1.20	350	O	W	Bk	S
GAL□0410P-470□	47.00	2.52	45	6.3	1.30	340	Y	V	Bk	S
GAL□0410P-560□	56.00	2.52	45	6.2	1.50	320	Gn	Bu	Bk	S
GAL□0410P-680□	68.00	2.52	40	5.7	1.80	305	Bu	Gy	Bk	S
GAL□0410P-820□	82.00	2.52	35	5.3	2.00	290	Gy	R	Bk	S
GAL□0410P-101□	100.00	2.52	30	4.8	2.50	275	Bn	Bk	Bn	S
GAL□0410P-121□	120.00	0.796	60	3.8	3.00	185	Bn	R	Bn	S
GAL□0410P-151□	150.00	0.796	60	3.5	4.00	175	Bn	Gn	Bn	S
GAL□0410P-181□	180.00	0.796	60	3.0	4.50	165	Bn	Gy	Bn	S
GAL□0410P-221□	220.00	0.796	60	2.8	5.00	155	R	R	Bn	S
GAL□0410P-271□	270.00	0.796	60	2.6	6.00	145	R	V	Bn	S
GAL□0410P-331□	330.00	0.796	60	2.4	6.50	137	O	O	Bn	S
GAL□0410P-391□	390.00	0.796	55	2.0	7.50	133	O	W	Bn	S
GAL□0410P-471□	470.00	0.796	50	1.8	8.50	126	Y	V	Bn	S
GAL□0410P-561□	560.00	0.796	50	1.6	9.50	120	Gn	Bu	Bn	S
GAL□0410P-681□	680.00	0.796	45	1.6	12.00	113	Bu	Gy	Bn	S
GAL□0410P-821□	820.00	0.796	45	1.4	14.00	105	Gy	R	Bn	S
GAL□0410P-102□	1000.00	0.796	40	1.2	20.00	85	Bn	Bk	R	S

IDC : Base on temp rise up 40 deg.C max.
□=J = 5% , K = 10% , M = 20%

Product Series Code	**GAL**	Brand	GOTREND
File Version	GAL-V2R4	Editor	Teddy
Established Date	1997.06.23	Description	Axial Lead Inductor Choke
Latest Edit Date	2013.02.23		

PART NO.	Inductance (mH)	Test Freq. (KHz)	Q Min.	SRF (MHz) Min.	DCR (Ohm) Max.	IDC (mA) Max.	COLOR CODE			
							1st	2nd	3rd	4th
GAL□0512P-102□	1.0	79.6	50	1.20	5	180	Bn	BK	R	S
GAL□0512P-122□	1.2	252	80	1.30	9	110	Bn	R	R	S
GAL□0512P-152□	1.5	252	80	1.20	10	100	Bn	Gn	R	S
GAL□0512P-182□	1.8	252	80	1.20	11	90	Bn	Gy	R	S
GAL□0512P-222□	2.2	252	80	1.10	14	80	R	R	R	S
GAL□0512P-272□	2.7	252	80	0.85	18	75	R	V	R	S
GAL□0512P-332□	3.3	252	80	0.74	22	65	O	O	R	S
GAL□0512P-392□	3.9	252	80	0.70	26	60	O	W	R	S
GAL□0512P-472□	4.7	252	80	0.66	32	55	Y	V	R	S
GAL□0512P-562□	5.6	252	70	0.64	34	50	Gn	Bu	R	S
GAL□0512P-682□	6.8	252	70	0.58	45	45	Bu	Gy	R	S
GAL□0512P-822□	8.2	252	50	0.50	60	40	Gy	R	R	S
GAL□0512P-103□	10.0	79.6	50	0.48	70	38	Bn	Bk	O	S
GAL□0512P-123□	12.0	79.6	50	0.46	82	35	Bn	R	O	S
GAL□0512P-153□	15.0	79.6	50	0.40	89	32	Bn	Gn	O	S
GAL□0512P-183□	18.0	79.6	40	0.37	140	28	Bn	Gy	O	S
GAL□0512P-223□	22.0	79.6	40	0.33	170	25	R	R	O	S
GAL□0512P-253□	25.0	79.6	40	0.28	185	24	R	Gn	O	S
GAL□0512P-273□	27.0	79.6	40	0.26	210	23	R	V	O	S
GAL□0512P-303□	30.0	79.6	40	0.25	240	22	O	Bk	O	S
GAL□0512P-333□	33.0	79.6	40	0.24	250	20	O	O	O	S

IDC : Base on temp rise up 40 deg.C max.



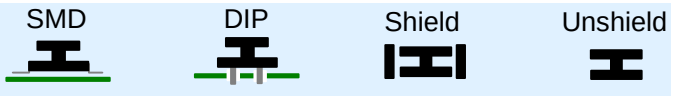
Product Series Code	**GDR**	Brand	GOTREND
File Version	GDR-V2R5	Editor	Teddy
Established Date	2009.07.09	Description	Drum Choke Inductor
Latest Edit Date	2013.02.23		

Features & Application:

* Drum Choke with low cost and high reliability.
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* Mobile Device / Handheld Device / LowProfile Device / Panel...

Product Structure

SMD ▼ DIP ▼ Shield Unshield



2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example:

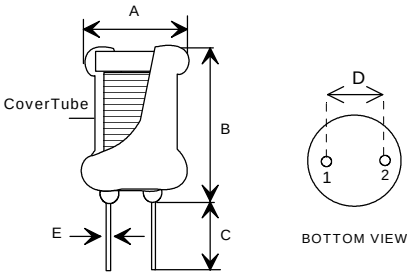
GDR 0810 P U - 151 K S
1 2 3 4 5 6 7

1.GOTREND Series : GDR
2.Dimension Code : LengthxWidth
3.P=Pb free < 1000ppm
4.U : UL Tube Covered
5.Inductance : 151=150 uH (180=18uH)
6.Tolerance: K 10% (J 5%; L 15%; M 20%; N 30%)
7.S= C Dimension 3.5± 0.5

Custom Design @ 1KHz,1V			
P/N	Inductance(uH)	DCR ohm [Max.]	IDC A. [Max.]

Dimensions:[mm]

MECHANICAL ASSEMBLY:



Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15ºC
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5ºC
Relative Humidity:75+/-10%

Type:

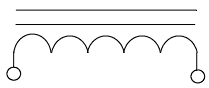
	ØA(max)	B(max)	C(+/-1.5)	D(+/-0.5)	Ø E(+/-0.05)
0406	6.0	7.5	15.0	2.0	0.50
0608	8.0	10.0	15.0	3.0	0.65
0810	10.0	11.5	15.0	5.0	0.65
0912	11.0	13.5	15.0	5.0	0.80
1012	12.0	13.5	15.0	6.0	0.80
1016	12.5	18.0	15.0	6.0	0.80

Operating & Storage Condition:

OPERATING TEMP:-40~+85ºC

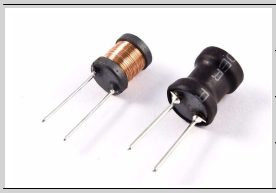
STORAGE TEMP:-40~+85ºC
STORAGE LIFE TIME: 12 MONTH @25ºC , RH 65%

SCHEMATIC:



Attention & Caution:

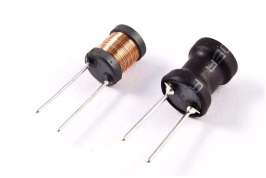
Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.



Product Series Code	**GDR**	Brand	GOTREND
File Version	GDR-V2R5	Editor	Teddy
Established Date	2009.07.09	Description	Drum Choke Inductor
Latest Edit Date	2013.02.23		

PART NO.	INDUCTANCE @ 1KHz/0.25V	DCR ohm [Max.]	IDC Amp. [Max.]
GDR0406P□-1R0□	1.0	0.030	3.00
GDR0406P□-1R5□	1.5	0.035	2.80
GDR0406P□-1R8□	1.8	0.040	2.70
GDR0406P□-2R2□	2.2	0.045	2.50
GDR0406P□-2R7□	2.7	0.050	2.50
GDR0406P□-3R3□	3.3	0.055	2.20
GDR0406P□-3R9□	3.9	0.055	2.20
GDR0406P□-4R7□	4.7	0.065	2.00
GDR0406P□-5R6□	5.6	0.070	1.80
GDR0406P□-6R8□	6.8	0.080	1.70
GDR0406P□-8R2□	8.2	0.090	1.50
GDR0406P□-100□	10.0	0.110	1.40
GDR0406P□-120□	12.0	0.140	1.20
GDR0406P□-150□	15.0	0.160	1.00
GDR0406P□-180□	18.0	0.180	1.00
GDR0406P□-220□	22.0	0.250	0.90
GDR0406P□-270□	27.0	0.370	0.80
GDR0406P□-330□	33.0	0.420	0.70
GDR0406P□-390□	39.0	0.450	0.70
GDR0406P□-470□	47.0	0.500	0.60
GDR0406P□-560□	56.0	0.560	0.60
GDR0406P□-680□	68.0	0.630	0.55
GDR0406P□-820□	82.0	0.770	0.50
GDR0406P□-101□	100.0	0.850	0.40
GDR0406P□-121□	120.0	1.300	0.40
GDR0406P□-151□	150.0	1.400	0.30
GDR0406P□-181□	180.0	2.200	0.30
GDR0406P□-221□	220.0	2.500	0.28
GDR0406P□-271□	270.0	2.700	0.25
GDR0406P□-331□	330.0	3.000	0.22
GDR0406P□-391□	390.0	3.400	0.21
GDR0406P□-471□	470.0	3.900	0.20
GDR0406P□-561□	560.0	5.000	0.16
GDR0406P□-681□	680.0	7.000	0.15
GDR0406P□-821□	820.0	7.700	0.14
GDR0406P□-102□	1000.0	8.700	0.12

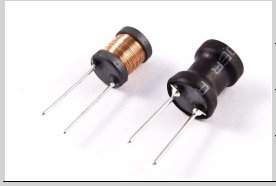
* Inductance drop: 10% typ. at IDC.
* □ : U = UL Tube
* □ : J 5%, K 10%, L 15%, M 20%, N 30%



Product Series Code	**GDR**	Brand	GOTREND
File Version	GDR-V2R5	Editor	Teddy
Established Date	2009.07.09	Description	Drum Choke Inductor
Latest Edit Date	2013.02.23		

PART NO.	INDUCTANCE @ 1KHz/0.25V	DCR ohm [Max.]	IDC Amp. [Max.]
GDR0608P□-1R0□	1.0	0.015	3.00
GDR0608P□-1R2□	1.2	0.015	2.80
GDR0608P□-1R5□	1.5	0.015	2.70
GDR0608P□-2R2□	2.2	0.015	2.60
GDR0608P□-2R7□	2.7	0.020	2.50
GDR0608P□-3R3□	3.3	0.020	3.71
GDR0608P□-3R9□	3.9	0.025	2.50
GDR0608P□-4R7□	4.7	0.025	2.30
GDR0608P□-5R6□	5.6	0.030	2.10
GDR0608P□-6R8□	6.8	0.115	1.80
GDR0608P□-8R2□	8.2	0.035	1.20
GDR0608P□-100□	10.0	0.045	1.00
GDR0608P□-120□	12.0	0.050	1.00
GDR0608P□-150□	15.0	0.055	0.90
GDR0608P□-180□	18.0	0.090	0.90
GDR0608P□-220□	22.0	0.095	0.80
GDR0608P□-270□	27.0	0.110	0.75
GDR0608P□-330□	33.0	0.125	0.70
GDR0608P□-390□	39.0	0.140	0.65
GDR0608P□-470□	47.0	0.160	0.60
GDR0608P□-560□	56.0	0.180	0.60
GDR0608P□-680□	68.0	0.200	0.56
GDR0608P□-820□	82.0	0.270	0.48
GDR0608P□-101□	100.0	0.310	0.45
GDR0608P□-121□	120.0	0.370	0.43
GDR0608P□-151□	150.0	0.600	0.40
GDR0608P□-181□	180.0	0.540	1.31
GDR0608P□-221□	220.0	1.000	0.38
GDR0608P□-271□	270.0	0.830	0.32
GDR0608P□-331□	330.0	1.340	0.94
GDR0608P□-391□	390.0	1.570	0.25
GDR0608P□-471□	470.0	2.000	0.87
GDR0608P□-561□	560.0	1.800	0.20
GDR0608P□-681□	680.0	2.100	0.18
GDR0608P□-821□	820.0	2.900	0.17
GDR0608P□-102□	1000.0	3.200	0.15
GDR0608P□-472□	4700.0	15.000	0.05

* Inductance drop: 10% typ. at IDC.
* □ : U = UL Tube
* □ : J 5%, K 10%, L 15%, M 20%, N 30%



Product Series Code	**GDR**	Brand	GOTREND
File Version	GDR-V2R5	Editor	Teddy
Established Date	2009.07.09	Description	Drum Choke Inductor
Latest Edit Date	2013.02.23		

PART NO.	INDUCTANCE @ 1KHz/0.25V	DCR ohm [Max.]	IDC Amp. [Max.]
GDR0810P□-1R0□	1.0	0.015	4.50
GDR0810P□-1R5□	1.5	0.020	4.50
GDR0810P□-2R2□	2.2	0.020	4.20
GDR0810P□-2R7□	2.7	0.020	4.20
GDR0810P□-3R3□	3.3	0.020	4.00
GDR0810P□-3R9□	3.9	0.020	4.00
GDR0810P□-4R7□	4.7	0.025	4.00
GDR0810P□-5R6□	5.6	0.025	4.00
GDR0810P□-6R8□	6.8	0.025	4.00
GDR0810P□-8R2□	8.2	0.035	3.80
GDR0810P□-100□	10	0.040	3.80
GDR0810P□-120□	12.0	0.040	3.20
GDR0810P□-150□	15.0	0.045	2.80
GDR0810P□-180□	18.0	0.060	2.50
GDR0810P□-220□	22.0	0.070	2.10
GDR0810P□-270□	27.0	0.085	2.00
GDR0810P□-330□	33.0	0.090	1.80
GDR0810P□-390□	39.0	0.100	1.60
GDR0810P□-470□	47.0	0.110	1.50
GDR0810P□-560□	56.0	0.150	1.30
GDR0810P□-680□	68.0	0.190	1.00
GDR0810P□-820□	82.0	0.210	0.90
GDR0810P□-101□	100.0	0.240	0.80
GDR0810P□-121□	120.0	0.260	0.80
GDR0810P□-151□	150.0	0.310	0.75
GDR0810P□-181□	180.0	0.380	0.70
GDR0810P□-221□	220.0	0.430	0.65
GDR0810P□-271□	270.0	0.490	0.63
GDR0810P□-331□	330.0	0.660	0.60
GDR0810P□-391□	390.0	0.790	0.58
GDR0810P□-471□	470.0	0.910	0.52
GDR0810P□-561□	560.0	1.130	0.50
GDR0810P□-681□	680.0	1.300	0.40
GDR0810P□-821□	820.0	0.530	0.30
GDR0810P□-102□	1000.0	1.800	0.27

*Inductance drop: 10% typ. at IDC.
* □ : U = UL Tube
* □ : J 5%, K 10%, L 15%, M 20%, N 30%

Product Series Code	**GDR**	Brand	GOTREND
File Version	GDR-V2R5	Editor	Teddy
Established Date	2009.07.09	Description	Drum Choke Inductor
Latest Edit Date	2013.02.23		

PART NO.	INDUCTANCE @ 1KHz/0.25V	DCR ohm [Max.]	IDC Amp. [Max.]
GDR0912P□-1R0□	1.0	0.015	5.00
GDR0912P□-1R5□	1.5	0.015	5.00
GDR0912P□-1R8□	1.8	0.015	5.00
GDR0912P□-2R2□	2.2	0.015	5.00
GDR0912P□-3R3□	3.3	0.020	4.80
GDR0912P□-3R9□	3.9	0.020	4.80
GDR0912P□-4R7□	4.7	0.020	4.50
GDR0912P□-5R6□	5.6	0.025	4.00
GDR0912P□-6R8□	6.8	0.025	3.90
GDR0912P□-8R2□	8.2	0.025	3.50
GDR0912P□-100□	10	0.030	3.40
GDR0912P□-120□	12.0	0.030	3.20
GDR0912P□-150□	15.0	0.040	3.00
GDR0912P□-180□	18.0	0.045	2.80
GDR0912P□-220□	22.0	0.050	2.70
GDR0912P□-270□	27.0	0.055	4.88
GDR0912P□-330□	33.0	0.055	4.30
GDR0912P□-390□	39.0	0.060	2.00
GDR0912P□-470□	47.0	0.070	1.80
GDR0912P□-560□	56.0	0.080	1.70
GDR0912P□-680□	68.0	0.090	1.50
GDR0912P□-820□	82.0	0.110	1.40
GDR0912P□-101□	100.0	0.160	1.20
GDR0912P□-121□	120.0	0.170	1.10
GDR0912P□-151□	150.0	0.200	1.00
GDR0912P□-181□	180.0	0.220	0.90
GDR0912P□-221□	220.0	0.260	0.80
GDR0912P□-271□	270.0	0.390	0.70
GDR0912P□-331□	330.0	0.450	0.50
GDR0912P□-391□	390.0	0.490	0.45
GDR0912P□-471□	470.0	0.620	0.43
GDR0912P□-561□	560.0	0.640	0.40
GDR0912P□-681□	680.0	1.000	1.72
GDR0912P□-821□	820.0	1.340	0.35
GDR0912P□-102□	1000.0	1.820	0.30

* Inductance drop: 10% typ. at IDC.
* □ : U = UL Tube
* □ : J 5%, K 10%, L 15%, M 20%, N 30%

Product Series Code	**GDR**	Brand	GOTREND
File Version	GDR-V2R5	Editor	Teddy
Established Date	2009.07.09	Description	Drum Choke Inductor
Latest Edit Date	2013.02.23		

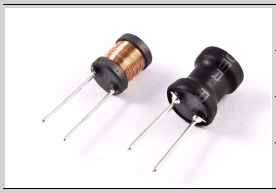
PART NO.	INDUCTANCE @ 1KHz/0.25V	DCR ohm [Max.]	IDC Amp. [Max.]
GDR1012P□-1R0□	1.0	0.010	6.00
GDR1012P□-1R5□	1.5	0.010	6.00
GDR1012P□-1R8□	1.8	0.015	6.00
GDR1012P□-2R7□	2.7	0.015	5.50
GDR1012P□-3R3□	3.3	0.015	5.50
GDR1012P□-3R9□	3.9	0.020	5.00
GDR1012P□-4R2□	4.2	0.020	5.00
GDR1012P□-4R7□	4.7	0.020	5.00
GDR1012P□-5R6□	5.6	0.025	4.80
GDR1012P□-6R8□	6.8	0.025	4.80
GDR1012P□-8R2□	8.2	0.025	4.50
GDR1012P□-100□	10.0	0.025	4.50
GDR1012P□-120□	12.0	0.025	4.30
GDR1012P□-150□	15.0	0.035	4.30
GDR1012P□-180□	18.0	0.040	4.00
GDR1012P□-220□	22.0	0.045	3.70
GDR1012P□-270□	27.0	0.045	3.50
GDR1012P□-330□	33.0	0.055	3.00
GDR1012P□-390□	39.0	0.060	2.50
GDR1012P□-470□	47.0	0.080	2.30
GDR1012P□-560□	56.0	0.085	2.00
GDR1012P□-680□	68.0	0.095	2.00
GDR1012P□-820□	82.0	0.110	1.80
GDR1012P□-101□	100.0	0.140	1.70
GDR1012P□-121□	120.0	0.160	1.50
GDR1012P□-151□	150.0	0.180	1.40
GDR1012P□-181□	180.0	0.250	1.30
GDR1012P□-221□	220.0	0.280	1.00
GDR1012P□-271□	270.0	0.420	0.90
GDR1012P□-331□	330.0	0.540	3.00
GDR1012P□-391□	390.0	0.680	1.72
GDR1012P□-471□	470.0	0.660	0.70
GDR1012P□-561□	560.0	0.740	0.60
GDR1012P□-681□	680.0	0.840	1.70
GDR1012P□-821□	820.0	1.080	0.50
GDR1012P□-102□	1000.0	1.390	0.50

* Inductance drop : 10% typ. at IDC.
* □ : U = UL Tube
* □ : J 5%, K 10%, L 15%, M 20%, N 30%

Product Series Code	**GDR**	Brand	GOTREND
File Version	GDR-V2R5	Editor	Teddy
Established Date	2009.07.09	Description	Drum Choke Inductor
Latest Edit Date	2013.02.23		

PART NO.	INDUCTANCE @ 1KHz/0.25V	DCR ohm [Max.]	IDC Amp. [Max.]
GDR1016P□-1R0□	1.0	0.010	9.00
GDR1016P□-1R5□	1.5	0.015	9.00
GDR1016P□-1R8□	1.8	0.015	9.00
GDR1016P□-2R7□	2.7	0.015	9.00
GDR1016P□-3R3□	3.3	0.015	8.50
GDR1016P□-3R9□	3.9	0.015	8.00
GDR1016P□-4R7□	4.7	0.020	7.50
GDR1016P□-5R6□	5.6	0.025	7.50
GDR1016P□-6R8□	6.8	0.025	7.50
GDR1016P□-8R2□	8.2	0.025	7.20
GDR1016P□-100□	10	0.030	7.20
GDR1016P□-120□	12.0	0.030	7.00
GDR1016P□-150□	15.0	0.035	6.50
GDR1016P□-180□	18.0	0.035	6.30
GDR1016P□-220□	22.0	0.045	5.50
GDR1016P□-270□	27.0	0.050	4.50
GDR1016P□-330□	33.0	0.070	4.00
GDR1016P□-390□	39.0	0.070	3.80
GDR1016P□-470□	47.0	0.070	3.60
GDR1016P□-560□	56.0	0.080	3.20
GDR1016P□-680□	68.0	0.090	3.00
GDR1016P□-820□	82.0	0.095	2.60
GDR1016P□-101□	100.0	0.120	3.71
GDR1016P□-121□	120.0	0.140	2.30
GDR1016P□-151□	150.0	0.170	2.10
GDR1016P□-181□	180.0	0.190	2.00
GDR1016P□-221□	220.0	0.250	1.80
GDR1016P□-271□	270.0	0.340	1.50
GDR1016P□-331□	330.0	0.450	1.50
GDR1016P□-391□	390.0	0.510	1.30
GDR1016P□-471□	470.0	0.560	1.20
GDR1016P□-561□	560.0	0.640	1.00
GDR1016P□-681□	680.0	0.710	1.00
GDR1016P□-821□	820.0	1.010	0.90
GDR1016P□-102□	1000.0	1.200	0.80
GDR1016P□-222□	2200.0	5.000	0.50
GDR1016P□-332□	3300.0	5.700	0.40
GDR1016P□-472□	4700.0	8.000	0.35

* Inductance drop: 10% typ. at IDC.
* □ : U = UL Tube
* □ : J 5%, K 10%, L 15%, M 20%, N 30%



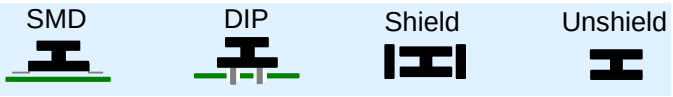
Product Series Code	**GHDR**	Brand	GOTREND
File Version	GHDR-V1R1	Editor	Teddy
Established Date	2012.01.06	Description	Drum Choke Inductor
Latest Edit Date	2013.02.23		

Features & Application:

* Drum Choke with low cost and high reliability.
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* Mobile Device / Handheld Device / LowProfile Device / Panel...

Product Structure

SMD ▼ DIP ▼ Shield Unshield



2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example:

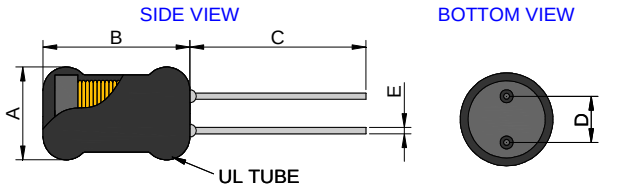
GHDR 0810 P □ - 101 □

1 2 3 4 5 6

1. GOTREND Series : GHDR
2. Dimension Code : Length x Width
3. P = Pb free < 1000ppm
4. U : UL Tube Covered
5. Inductance : 101 = 100 uH (Ex: 1R0 = 1.0 uH ; 100 = 10 uH)
6. Tolerance : K = 10% ; M = 20%

DIMENSION : [mm]

MECHANICAL ASSEMBLY



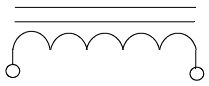
TYPE :	A (max.)	B (max.)	C (+/-1.5)	D (+/-0.5)	E (+/-0.05)
0810	10.00	11.50	15.00	5.00	0.65
0912	11.00	13.50	15.00	5.00	0.80

Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15°C
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:75+/-10%

SCHEMATIC:



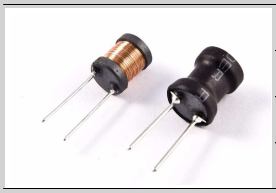
Operating & Storage Condition:

OPERATING TEMP : -55 ~ +105°C

STORAGE TEMP : -40 ~ +105°C
STORAGE LIFE TIME : 12 MONTH @25°C , RH 65%

Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

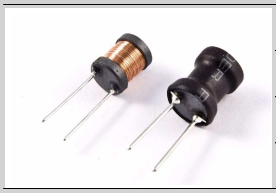


Product Series Code	**GHDR**	Brand	GOTREND
File Version	GHDR-V1R1	Editor	Teddy
Established Date	2012.01.06	Description	Drum Choke Inductor
Latest Edit Date	2013.02.23		

Electrical Characteristics：

PART NO.	INDUCTANCE @ 1KHz / 0.25V	DCR Ohm [Max.]	IDC Amp. [Typ.]
GHDR0810P□-1R0□	1.0	0.013	10.00
GHDR0810P□-1R5□	1.5	0.016	8.50
GHDR0810P□-2R2□	2.2	0.021	6.50
GHDR0810P□-3R3□	3.3	0.025	5.50
GHDR0810P□-4R7□	4.7	0.030	4.60
GHDR0810P□-6R8□	6.8	0.035	4.10
GHDR0810P□-100□	10.0	0.045	3.40
GHDR0810P□-120□	12.0	0.050	3.10
GHDR0810P□-150□	15.0	0.056	2.90
GHDR0810P□-180□	18.0	0.061	2.66
GHDR0810P□-220□	22.0	0.070	2.40
GHDR0810P□-270□	27.0	0.080	2.22
GHDR0810P□-330□	33.0	0.090	2.05
GHDR0810P□-390□	39.0	0.100	1.85
GHDR0810P□-470□	47.0	0.160	1.77
GHDR0810P□-560□	56.0	0.180	1.48
GHDR0810P□-680□	68.0	0.210	1.40
GHDR0810P□-820□	82.0	0.230	1.36
GHDR0810P□-101□	100.0	0.280	1.30
GHDR0810P□-121□	120.0	0.320	1.25
GHDR0810P□-151□	150.0	0.370	1.15
GHDR0810P□-181□	180.0	0.580	1.08
GHDR0810P□-221□	220.0	0.650	1.00
GHDR0810P□-271□	270.0	0.750	0.90
GHDR0810P□-331□	330.0	0.850	0.78
GHDR0810P□-391□	390.0	1.000	0.74
GHDR0810P□-471□	470.0	1.100	0.68
GHDR0810P□-561□	560.0	1.400	0.64
GHDR0810P□-681□	680.0	1.600	0.59
GHDR0810P□-821□	820.0	1.800	0.56
GHDR0810P□-102□	1000.0	2.900	0.51

*Inductance drop: 10% typ. at IDC.
* □ : U = UL Tube
* □ : K = 10% , M 20%



Product Series Code	**GHDR**	Brand	GOTREND
File Version	GHDR-V1R1	Editor	Teddy
Established Date	2012.01.06	Description	Drum Choke Inductor
Latest Edit Date	2013.02.23		

Electrical Characteristics：

PART NO.	INDUCTANCE @ 1KHz / 0.25V	DCR Ohm [Max.]	IDC Amp. [Typ.]
GHDR0912P□-1R0□	1.0	0.012	17.00
GHDR0912P□-1R5□	1.5	0.015	16.00
GHDR0912P□-2R2□	2.2	0.020	15.00
GHDR0912P□-3R3□	3.3	0.022	14.50
GHDR0912P□-4R7□	4.7	0.026	11.00
GHDR0912P□-6R8□	6.8	0.032	9.00
GHDR0912P□-100□	10.0	0.044	8.00
GHDR0912P□-120□	12.0	0.049	7.00
GHDR0912P□-150□	15.0	0.055	6.00
GHDR0912P□-180□	18.0	0.060	5.50
GHDR0912P□-220□	22.0	0.067	5.00
GHDR0912P□-270□	27.0	0.075	4.00
GHDR0912P□-330□	33.0	0.084	3.80
GHDR0912P□-390□	39.0	0.090	3.50
GHDR0912P□-470□	47.0	0.150	3.20
GHDR0912P□-560□	56.0	0.170	3.00
GHDR0912P□-680□	68.0	0.190	2.70
GHDR0912P□-820□	82.0	0.215	2.40
GHDR0912P□-101□	100.0	0.245	2.20
GHDR0912P□-121□	120.0	0.270	2.00
GHDR0912P□-151□	150.0	0.335	1.90
GHDR0912P□-181□	180.0	0.540	1.80
GHDR0912P□-221□	220.0	0.610	1.60
GHDR0912P□-271□	270.0	0.680	1.50
GHDR0912P□-331□	330.0	0.770	1.40
GHDR0912P□-391□	390.0	0.900	1.30
GHDR0912P□-471□	470.0	1.000	1.20
GHDR0912P□-561□	560.0	1.250	1.10
GHDR0912P□-681□	680.0	1.450	1.00
GHDR0912P□-821□	820.0	1.720	0.90
GHDR0912P□-102□	1000.0	2.600	0.80

*Inductance drop: 10% typ. at IDC.
* □ : U = UL Tube
* □ : K = 10% , M 20%

Product Series Code	**GCL**	Brand	GOTREND
File Version	GCL-V2R1	Editor	Robert
Established Date	1997.03.26	Description	Coil for Switching Power
Latest Edit Date	2013.02.23		

Features & Application:

* Good in EMI effect and various custom design
* Fit for power line input / output application
* To help you go pass the CE/FCC standard.
* MainBoard / NB / IPC / Server / VRM moudle...etc.

Custom Design

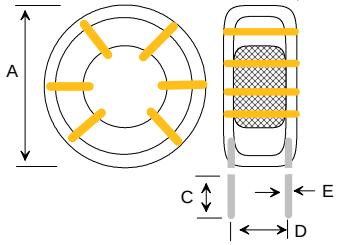
Product Structure

SMD ▼ DIP ▼ Ring Unshield

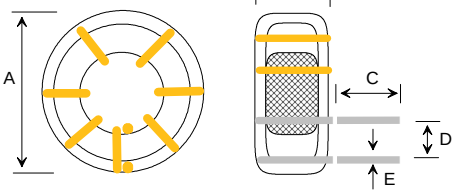
2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

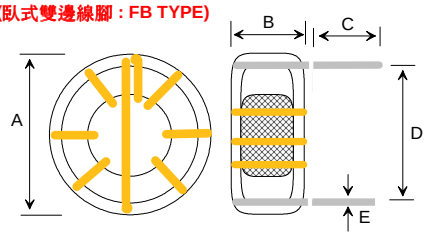
(立式: DP TYPE)



(臥式單邊線腳 : FA TYPE)



(臥式雙邊線腳 : FB TYPE)



無鉛政策聲明: Pb (Lead) free Policy

本產品符合RoHS環保物質管制規範,材料之使用亦符合6大物質含量之規範,檢驗證書明細請查照附件 !

高創科技環型線圈客製類別種類多元,不適合逐一重新送認,因此特以此文件表述環保物質政策及認證依據,讓使用客戶可有系列的查驗核對:
1.無鉛識別:料號中增加如右列說明的無鉛代號 " P "
2.隨此文件加附SGS檢驗報告
3.隨此文件檢附客戶使用料號對照清單

Test Equipment :

* HP4284,HP42841A- L,IDC,Q.DCR

Standard Atmospheric Conditions:
Ambient Temp:20+/-15ºC
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5ºC
Relative Humidity:75+/-10%

Part No Example:

C 50 52 B P- 10 A 12 Y DP T S
-- ---- ---- -- -- ---- -- ---- -- ---- -- --
1 2 3 4 S 5 6 7 8 9 10 11

1.CORE Type: C=Ring Core
2.CORE SIZE CODE:
3.CORE MATERIAL CODE:
4.EXTENDED TYPE
S.Pb free Code : P =Pb free < 1000ppm
5.WIRE SIZE:10=1.0mm / 06=0.6mm.....etc.
6.WIRE COUNT:A=SINGLE , B=2 WIRE , C=3 WIRE...etc.
7.WIRE TURNS(TNS): 100=100 Turns
8.WIRE COLOR:Y=COPPER YELLOW , R=COPPER RED
9.PIN FOOT :DP=DIP ,FA=ID (single) SIDE,FB=OD(double) SIDE
10.TUBE: T=Covered with UL Tube
11.Special Code: S

Operating & Storage Condition:

OPERATING TEMP:-40~+85ºC

STORAGE TEMP:-40~+85ºC
STORAGE LIFE TIME: 12 MONTH @25ºC , RH 65%

Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Product Series Code	**GNLC**	Brand	GOTREND
File Version	GNLC-V5R0	Editor	Teddy
Established Date	2009.05.07	Description	Molding Wound Inductor - IDC Enhanced
Latest Edit Date	2013.02.23		

Features & Application:

* High-Current : DC Current Enhanced

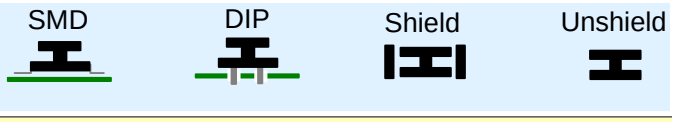
* Fit for power line & signal line circuit

* To help you go pass the CE/FCC standard.

* Mobile Device / Handheld Device / LowProfile Device / Panel...

Product Structure

SMD DIP Shield Unshield



2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

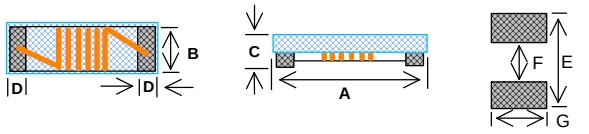
Part No Example:

GNLC	3225	P	□	- 6R8	J
1	2	3	4	5	6

1. GOTREND SERIES : GNLC
2. Dimension Code: 3225 [L-3.6 x W-2.9 mm]
3. Pb Free Code:Sony GP rule-PAD Pb<1000ppm
4. [R] : Low DCR Type
5. [L] Value : Inductance 68N=0.068uH , 6R8 = 6.8uH
6. Tolerance : J=5% , K=10%

Dimensions: [mm] 1610/2012/2520/3225 TYPE

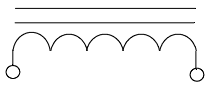
Bottom View Side View Recommand PAD



Type	A	B	C	D	E	F	G
GNLC-1610PR	1.8 MAX	1.20 MAX	1.00 MAX	0.33 REF	1.92	0.80	1.02
GNLC-2012PR	2.4 MAX	1.65 MAX	1.25 MAX	0.44 REF	2.80	0.96	1.78
GNLC-2520	2.9 MAX	2.54 MAX	2.00 MAX	0.50 REF	3.31	1.27	2.54
GNLC-3225	3.6 MAX	2.90 MAX	2.50 MAX	0.50 REF	4.40	2.00	2.70

■ Recommended thickness of the solder paste on the PCB : 0.10 ~ 0.15 mm

SCHEMATIC:



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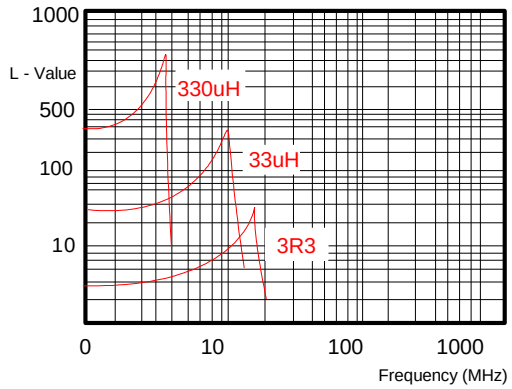
3225 L v.s Frequency Curve



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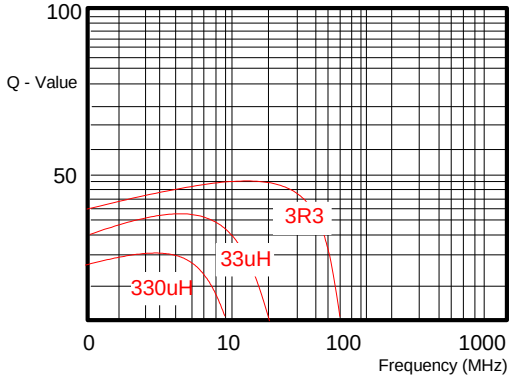
3225 Q v.s Frequency Curve



Product Series Code	**GNLC**	Brand	GOTREND
File Version	GNLC-V5R0	Editor	Teddy
Established Date	2009.05.07	Description	Molding Wound Inductor - IDC Enhanced
Latest Edit Date	2013.02.23		

Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

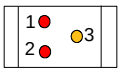
Standard Atmospheric Conditions:
Ambient Temp:20+/-15°C
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:75+/-10%

★ Marking Code Description:

1610 / 2012 SIZE - Color Dot Marking :

One Dot Marking - see series specification define

2520 / 3225 SIZE - Color Dot Marking :



0 1 2 3 4 5 6 7 8 9
黑 棕 紅 橙 黃 綠 藍 紫 灰 白

料號色碼依下列算法計之.....
Counting the inductance as below :
[(1st dot x10)+2 nd dot]x10 3 rd dot=nH
For Example:
GNLC-2520-220J Color Dot=紅 1st 紅 2nd 橙 3rd
Inductance= [(紅 2) x 10 + (紅 2)] x (橙)10x10x10)
=22x1000=22000nH
22000 ÷ 1000 = 22uH

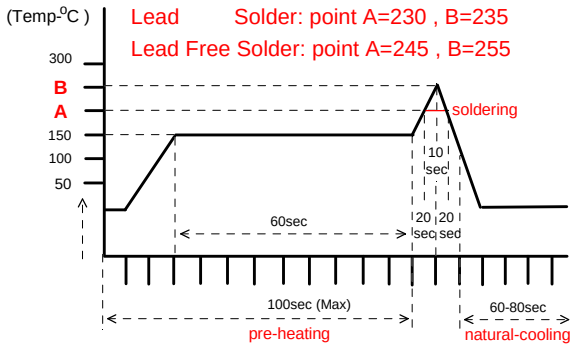
4532 / 5650 - Word Marking

Operating & Storage Condition:

OPERATING TEMP:-25~+85°C

STORAGE TEMP:-25~+85°C
STORAGE LIFE TIME: 6 MONTH @25°C , RH 65%

Recommand Reflow Curve (TIME:Second)



Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Part NO.	L - Value (uH)	Tolerance (± %)	Q value (Typ.)	Test Freq. (MHz)	S.R.F (MHz) (Typ.)	DCR (ohm) (+/-30%)	IDC (mA) (Typ.)	Irms (mA) (Typ.)	Color-Dot Marking
GNLC1610PR-1R0☐	1.00	10%,20%	16	7.9	390.0	0.32	860	700	Black
GNLC1610PR-1R5☐	1.50	10%,20%	16	7.9	160.0	0.40	720	600	Brown
GNLC1610PR-1R8☐	1.80	10%,20%	16	7.9	121.0	0.43	640	580	Red
GNLC1610PR-2R2☐	2.20	10%,20%	16	7.9	103.0	0.56	600	580	Orange
GNLC1610PR-2R7☐	2.70	10%,20%	16	7.9	72.0	0.62	540	500	Yellow
GNLC1610PR-3R3☐	3.30	10%,20%	16	7.9	66.0	0.70	500	500	Green
GNLC1610PR-3R9☐	3.90	10%,20%	16	7.9	61.0	0.83	460	460	Blue
GNLC1610PR-4R7☐	4.70	10%,20%	16	7.9	51.0	0.97	400	420	Violet
GNLC1610PR-5R6☐	5.60	10%,20%	16	7.9	47.0	1.10	380	380	Gray
GNLC1610PR-6R8☐	6.80	10%,20%	16	7.9	43.0	1.50	340	340	White
GNLC1610PR-8R2☐	8.20	10%,20%	16	7.9	40.0	1.68	300	300	Black
GNLC1610PR-100☐	10.00	10%,20%	14	2.5	36.0	1.85	280	280	Brown
GNLC1610PR-120☐	12.00	10%,20%	14	2.5	32.0	2.28	260	260	Red
GNLC1610PR-150☐	15.00	10%,20%	14	2.5	29.0	2.60	240	240	Orange
GNLC1610PR-180☐	18.00	10%,20%	14	2.5	28.0	2.90	220	220	Yellow
GNLC1610PR-220☐	22.00	10%,20%	14	2.5	24.0	3.61	200	200	Green
GNLC1610PR-270☐	27.00	10%,20%	14	2.5	20.0	5.20	140	140	Blue
GNLC1610PR-330☐	33.00	10%,20%	14	2.5	15.0	6.60	120	120	Violet

* Part No. Example : GNLC1610PR-4R7J (GNLC Series 1610 Size, 4.7 uH, +/- 5%)
* Tolerance Code : ☐ K=+/-10%, M=+/-20% (all available)
* Test Instruments : L,Q：Agilent/HP E4991A+Agilent/HP 16197A
  SRF：Agilent/E5071B / Agilent/HP E4991A
  RDC：Digital Milliohm Meter Chroma 16502, or equivalent.

*IDC for Inductance drop 10% from its value without current.
*Irms for a 15°C rise above 25°C ambient.

Product Series Code	**GNLC**	Brand	GOTREND
File Version	GNLC-V5R0	Editor	Teddy
Established Date	2009.05.07	Description	Molding Wound Inductor - IDC Enhanced
Latest Edit Date	2013.02.23		

Part NO.	L - Value (uH)	Tolerance (± %)	Q value (Typ.)	Test Freq. (MHz)	S.R.F (MHz) (Typ.)	DCR (ohm) (+/-30%)	IDC (mA) (Typ.)	Irms (mA) (Typ.)	Color-Dot Marking
GNLC2012PR-R47☐	0.47	10%,20%	14	7.9	850.0	0.12	1400	1500	Blue
GNLC2012PR-R68☐	0.68	10%,20%	14	7.9	765.0	0.15	1200	1300	Gray
GNLC2012PR-1R0☐	1.00	5%,10%,20%	14	7.9	208.0	0.13	1100	1300	Black
GNLC2012PR-1R2☐	1.20	5%,10%,20%	14	7.9	159.0	0.16	960	1270	Red
GNLC2012PR-1R5☐	1.50	5%,10%,20%	14	7.9	159.0	0.17	920	1260	Brown
GNLC2012PR-1R8☐	1.80	5%,10%,20%	14	7.9	112.0	0.20	860	1080	Orange
GNLC2012PR-2R2☐	2.20	5%,10%,20%	13	7.9	87.0	0.22	740	1040	Red
GNLC2012PR-2R7☐	2.70	5%,10%,20%	13	7.9	72.0	0.25	680	1040	Yellow
GNLC2012PR-3R3☐	3.30	5%,10%,20%	12	7.9	70.0	0.28	620	1020	Orange
GNLC2012PR-3R9☐	3.90	5%,10%,20%	14	7.9	61.0	0.38	580	960	Green
GNLC2012PR-4R7☐	4.70	5%,10%,20%	14	7.9	51.0	0.43	520	840	Yellow
GNLC2012PR-5R6☐	5.60	5%,10%,20%	12	7.9	47.0	0.50	480	800	Blue
GNLC2012PR-6R8☐	6.80	5%,10%,20%	14	7.9	46.0	0.68	420	700	Green
GNLC2012PR-8R2☐	8.20	5%,10%,20%	13	7.9	33.0	0.73	400	680	Violet
GNLC2012PR-100☐	10.00	5%,10%,20%	14	2.5	31.0	0.85	360	560	Blue
GNLC2012PR-120☐	12.00	5%,10%,20%	14	2.5	30.0	0.90	340	460	Gray
GNLC2012PR-150☐	15.00	5%,10%,20%	15	2.5	28.0	1.40	300	380	Violet
GNLC2012PR-180☐	18.00	5%,10%,20%	15	2.5	27.0	1.55	280	360	White
GNLC2012PR-220☐	22.00	5%,10%,20%	15	2.5	20.0	1.76	240	340	Gray
GNLC2012PR-270☐	27.00	5%,10%,20%	15	2.5	17.0	2.00	220	300	Black
GNLC2012PR-330☐	33.00	5%,10%,20%	15	2.5	17.0	2.35	200	300	White
GNLC2012PR-470☐	47.00	5%,10%,20%	14	2.5	15.0	3.40	160	280	Black
GNLC2012PR-560☐	56.00	5%,10%,20%	14	2.5	10.0	4.42	150	240	Yellow
GNLC2012PR-680☐	68.00	5%,10%,20%	14	2.5	10.0	4.45	140	240	Brown
GNLC2012PR-820☐	82.00	5%,10%,20%	14	2.5	10.0	7.50	100	180	Orange
GNLC2012PR-101☐	100.00	5%,10%,20%	10	1.0	9.0	7.50	100	180	Red

* Part No. Example : GNLC2012PR-4R7J (GNLC Series 2012 Size, 4.7 uH, +/- 5%)
* Tolerance Code : ☐ J=+/-5%, K=+/-10%, M=+/-20% (all available)
* Test Instruments : L,Q：Agilent/HP E4991A+Agilent/HP 16197A
SRF：Agilent/E5071B / Agilent/HP E4991A
RDC：Digital Milliohm Meter Chroma 16502, or equivalent.

*IDC for Inductance drop 10% from its value without current.
*Irms for a 25°C rise above 25°C ambient.

Product Series Code	**GNLC**	Brand	GOTREND
File Version	GNLC-V5R0	Editor	Teddy
Established Date	2009.05.07	Description	Molding Wound Inductor - IDC Enhanced
Latest Edit Date	2013.02.23		

Part NO.	L - Value (uH)	Tolerance (± %)	Q value (min)	Test Freq. (MHz)	S.R.F (MHz) (min)	DCR (ohm) (max)	IDC (mA) (max)	Irms (mA) (Typ)	Color-Dot Marking		
GNLC2520P-R47☐	0.47	5%,10%	35	25	460	0.20	2400	1100	Yellow	Violet	Brown
GNLC2520P-R25☐	0.25	5%,10%	35	25	800	0.15	2600	2400	Red	Red	Brown
GNLC2520P-R82☐	0.82	5%,10%	35	25	360	0.35	1800	1000	Gray	Red	Brown
GNLC2520P-1R0☐	1.0	5%,10%	32	7.9	340	0.34	2100	900	Brown	Black	Red
GNLC2520P-1R2☐	1.2	5%,10%	25	7.9	290	0.25	1900	860	Brown	Red	Red
GNLC2520P-1R5☐	1.5	5%,10%	32	7.9	230	0.42	1800	740	Brown	Green	Red
GNLC2520P-1R8☐	1.8	5%,10%	27	7.9	180	0.45	1700	720	Brown	Gray	Red
GNLC2520P-2R2☐	2.2	5%,10%	27	7.9	140	0.50	1500	700	Red	Red	Red
GNLC2520P-2R7☐	2.7	5%,10%	27	7.9	130	0.55	1300	560	Red	Violet	Red
GNLC2520P-3R3☐	3.3	5%,10%	27	7.9	125	0.60	1300	540	Orange	Orange	Red
GNLC2520P-3R9☐	3.9	5%,10%	27	7.9	100	0.80	1200	480	Orange	White	Red
GNLC2520P-4R7☐	4.7	5%,10%	27	7.9	90	0.90	1100	400	Yellow	Violet	Red
GNLC2520P-5R6☐	5.6	5%,10%	27	7.9	60	1.00	1000	400	Green	Blue	Red
GNLC2520P-6R8☐	6.8	5%,10%	27	7.9	60	1.05	950	420	Blue	Gray	Red
GNLC2520P-8R2☐	8.2	5%,10%	25	7.9	55	1.20	850	380	Gray	Red	Red
GNLC2520P-100☐	10.0	5%,10%	23	2.5	55	1.55	800	240	Brown	Black	Orange
GNLC2520P-120☐	12.0	5%,10%	23	2.5	36	2.10	630	220	Brown	Red	Orange
GNLC2520P-150☐	15.0	5%,10%	23	2.5	36	2.38	580	200	Brown	Green	Orange
GNLC2520P-180☐	18.0	5%,10%	23	2.5	32	2.50	550	180	Brown	Gray	Orange
GNLC2520P-220☐	22.0	5%,10%	23	2.5	29	2.92	550	180	Red	Red	Orange
GNLC2520P-330☐	33.0	5%,10%	23	2.5	21	4.10	450	140	Orange	Orange	Orange
GNLC2520P-390☐	39.0	5%,10%	18	2.5	15	5.50	340	270	Orange	White	Orange
GNLC2520P-470☐	47.0	5%,10%	23	2.5	17	7.80	350	100	Yellow	Violet	Orange
GNLC2520P-680☐	68.0	5%,10%	20	2.5	9	11.50	260	100	Blue	Gray	Orange

* Part No. Example : GNLC2520P-4R7J (GNLC Series 2520 Size, 4.7 uH, +/- 5%)
* Tolerance Code : ☐ J=+/-5%, K=+/-10%, M=+/-20% (all available)
* Test Instruments : L,Q：Agilent/HP E4991A+Agilent/HP 16197A
SRF：Agilent/E5071B / Agilent/HP E4991A
RDC：Digital Milliohm Meter Chroma 16502, or equivalent.

*IDC for Inductance drop 10% from its value without current.

Product Series Code	**GNLC**	Brand	GOTREND
File Version	GNLC-V5R0	Editor	Teddy
Established Date	2009.05.07	Description	Molding Wound Inductor - IDC Enhanced
Latest Edit Date	2013.02.23		

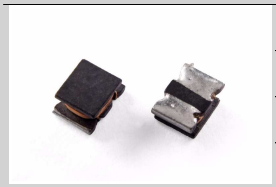
Part NO.	L - Value (uH)	Tolerance (± %)	Q value (min)	Test Freq. (MHz)	S.R.F (MHz) (min)	DCR (ohm) (max)	IDC (mA) (max)	Color-Dot Marking		
GNLC3225P-R39☐	0.39	5%	40	25.0	500	0.090	3000	Orange	White	Brown
GNLC3225P-R47☐	0.49	5%,10%	40	25.0	500	0.090	3000	Yellow	Violet	Brown
GNLC3225P-R56☐	0.56	10%	40	25.0	500	0.100	3000	Green	Blue	Brown
GNLC3225P-1R0☐	1.0	5%,10%	35	7.9	340	0.125	2600	Brown	Black	Red
GNLC3225P-1R2☐	1.2	5%,10%	35	7.9	280	0.135	2400	Brown	Red	Red
GNLC3225P-1R5☐	1.5	5%,10%	30	7.9	160	0.145	2200	Brown	Green	Red
GNLC3225P-1R8☐	1.8	5%,10%	30	7.9	120	0.160	2000	Brown	Gray	Red
GNLC3225P-2R2☐	2.2	5%,10%	30	7.9	100	0.175	1900	Red	Red	Red
GNLC3225P-2R5☐	2.5	5%,10%	30	7.9	80	0.190	1700	Red	Green	Red
GNLC3225P-3R3☐	3.3	5%,10%	30	7.9	70	0.210	1500	Orange	Orange	Red
GNLC3225P-4R7☐	4.7	5%,10%	28	7.9	55	0.300	1300	Yellow	Violet	Red
GNLC3225P-6R8☐	6.8	5%,10%	28	7.9	45	0.370	1100	Blue	Gray	Red
GNLC3225P-8R2☐	8.2	5%,10%	28	7.9	45	0.470	940	Green	Red	Red
GNLC3225P-100☐	10.0	5%,10%	22	2.5	47	0.500	900	Brown	Black	Orange
GNLC3225P-120☐	12.0	5%,10%	22	2.5	42	0.680	820	Brown	Red	Orange
GNLC3225P-150☐	15.0	5%,10%	22	2.5	34	0.720	740	Brown	Green	Orange
GNLC3225P-180☐	18.0	5%,10%	22	2.5	28	0.950	680	Brown	Gray	Orange
GNLC3225P-220☐	22.0	5%,10%	22	2.5	25	1.100	640	Red	Red	Orange
GNLC3225P-270☐	27.0	5%,10%	20	2.5	18	1.250	570	Red	Viole	Orange
GNLC3225P-330☐	33.0	5%,10%	20	2.5	13	1.370	500	Orange	Orange	Orange
GNLC3225P-390☐	39.0	5%,10%	20	2.5	13	1.850	400	Orange	White	Orange
GNLC3225P-470☐	47.0	5%,10%	20	2.5	12	1.880	440	Yellow	Violet	Orange
GNLC3225P-560☐	56.0	5%,10%	22	2.5	10	2.750	380	Green	Blue	Orange
GNLC3225P-680☐	68.0	5%,10%	22	2.5	10	3.000	360	Blue	Gray	Orange
GNLC3225P-820☐	82.0	5%,10%	22	2.5	10	4.100	320	Gray	Red	Orange
GNLC3225P-101☐	100.0	5%,10%	15	1.0	8	4.682	280	Brown	Black	Yellow
GNLC3225P-121☐	120.0	5%,10%	15	1.0	7	5.800	220	Brown	Red	Yellow
GNLC3225P-151☐	150.0	5%,10%	13	1.0	7	6.102	220	Brown	Green	Yellow
GNLC3225P-181☐	180.0	5%,10%	13	1.0	3	7.100	200	Brown	Gray	Yellow
GNLC3225P-221☐	220.0	5%,10%	13	1.0	3	7.650	200	Red	Red	Yellow
GNLC3225P-331☐	330.0	5%,10%	13	1.0	3	12.620	160	Orange	Orange	Yellow
GNLC3225P-471☐	470.0	5%,10%	13	1.0	3	25.000	120	Yellow	Violet	Yellow
GNLC3225P-561☐	560.0	5%,10%	13	1.0	2	27.000	100	Green	Blue	Yellow
GNLC3225P-681☐	680.0	5%,10%	13	1.0	2	31.000	100	Blue	Gray	Yellow
GNLC3225P-821☐	820.0	5%,10%	10	1.0	2	42.000	50	Gray	Red	Yellow
GNLC3225P-102☐	1000.0	5%,10%	10	1.0	2	46.000	50	Brown	Black	Red

* Part No. Example : GNLC3225P-4R7J (GNLC Series 3225 Size, 4.7 uH, +/- 5%)
* Tolerance Code : ☐ J=+/-5%, K=+/-10%, M=+/-20% (all available)
* Test Instruments : L,Q：Agilent/HP E4991A+Agilent/HP 16197A
SRF：Agilent/E5071B / Agilent/HP E4991A
RDC：Digital Milliohm Meter Chroma 16502, or equivalent.

*IDC for Inductance drop 10% from its value without current.

MARKING COLOR REFERENCE CHART

GOTREND Technology Co., Ltd.
http://www.gotrend.com.tw



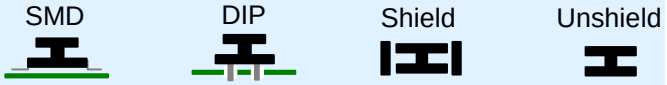
Product Series Code	**GTLQH**	Brand	GOTREND
File Version	GTLQH-V4R4	Editor	Teddy
Established Date	2009.07.09	Description	Ferrite Core Wound Inductor - Murxta LQH Series Compatiable
Latest Edit Date	2013.02.23		

Features & Application:

* High-Q value for signal line
* Wide band signal line,PWM circuit in/output inductor
* To help you go pass the CE/FCC standard.
* Especially for XDSL Lan & Communication

Product Structure

SMD | DIP | Shield | Unshield



2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

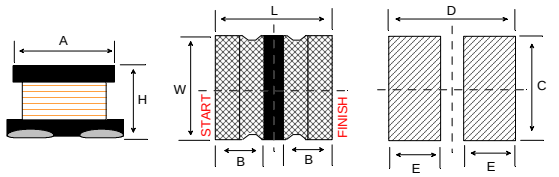
Part No Example:

GTLQH	43	P	G -	121	J
1	2	3	4	5	6

1. GOTREND Series : GTLQH
2. Size Code : 25=2.5x2.0, 43=4.5x3.2.....etc.
3. [P] : Pb Free < 1000ppm
4. [G] : Pour Epoxy
   [C] : High Current
   [L] : Low Hight enhance
5. [L] Value : Inductance Ex.:121=120uH, 122=1200uH
6. [L] Value Tolerance: J=5%, K=10%, M=20%, N=30%

Dimension: [mm]

Side View | Bottom View | Recommend Pad Layout



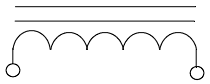
SIZE	L+/-0.3	W+/-0.3	H+/-0.4	A+/-0.3	B-Ref	C-Ref	D-Ref	E-Ref
20L	2.0+/-0.2	1.6+/-0.2	1.05 max	2.0+/-0.2	0.4~0.8	2.0	2.7	1.0
20	2.1	1.5	1.4	2.0	0.4~0.8	1.8	2.5	0.7
25L	2.5+/-0.2	2.1+/-0.2	1.05 max	2.5+/-0.2	0.6~1.0	2.5	3.2	1.2
25	2.5	2.0	1.8	2.0	0.4~0.8	2.8	3.5	0.7
31	3.2	1.6	1.8	2.3	0.4~0.9	3.5	4.5	1.6
32L	3.2	2.5	1.55+/-0.2	2.5	0.7~1.2	3.5	4.5	1.6
32	3.2	2.5	2.0	2.5	0.7~1.2	3.5	4.5	1.6
43	4.5	3.2	2.6	3.6	1.0~1.8	4.2	5.5	2.3
56	5.7	5.0	4.7	5.0	1.1~1.9	6.5	7.0	2.5

Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15°C
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:75+/-10%

SCHEMATIC:



Operating & Storage Condition:

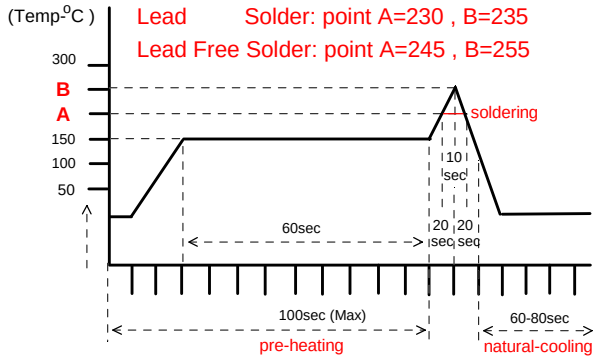
OPERATING TEMP:-40~+85°C

STORAGE TEMP:-40~+85°C
STORAGE LIFE TIME: 12 MONTH @25°C , RH 65%

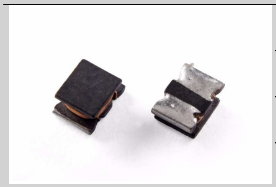
Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

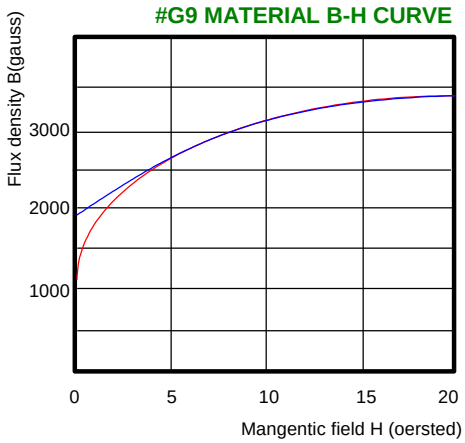
Recommand Reflow Curve (TIME:Second)

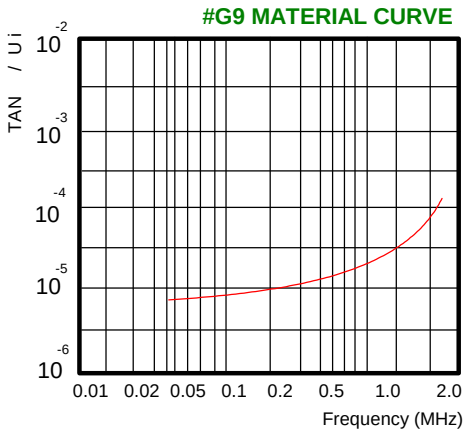


Notice: Iron Soldering: 3 Seconds Max. @260° C

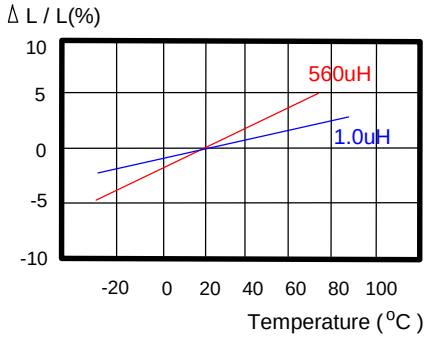


Product Series Code	**GTLQH**	Brand	GOTREND
File Version	GTLQH-V4R4	Editor	Teddy
Established Date	2009.07.09	Description	Ferrite Core Wound Inductor - Murxta LQH Series Compatiable
Latest Edit Date	2013.02.23		

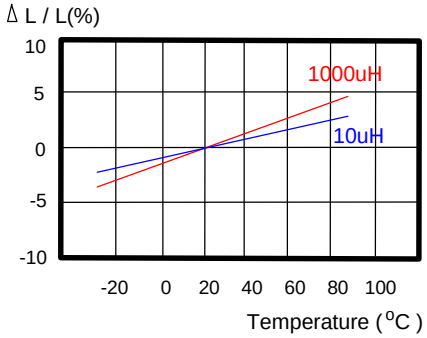




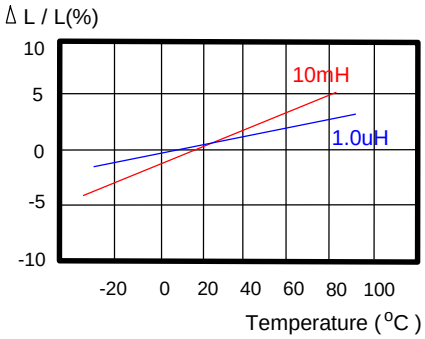
GTLQH32 - Inductance v.s Temperature

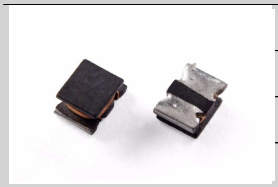


GTLQH43 - Inductance v.s Temperature



GTLQH56 - Inductance v.s Temperature



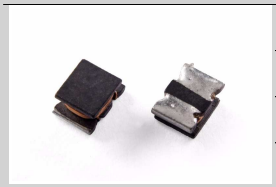


Product Series Code	**GTLQH**	Brand	GOTREND
File Version	GTLQH-V4R4	Editor	Teddy
Established Date	2009.07.09	Description	Ferrite Core Wound Inductor - Murxta LQH Series Compatiable
Latest Edit Date	2013.02.23		

Part No.	L (uH)	Test Freq. (MHz / 0.2V)	DCR ohm (max)	Isat (A) (typ)	Irms (A) (typ)
GTLQH20PL-1R0 ☐	1.00	1.00	0.180	1.70	1.42
GTLQH20PL-1R5 ☐	1.50	1.00	0.250	1.30	1.34
GTLQH20PL-2R2 ☐	2.20	1.00	0.340	1.10	1.04
GTLQH20PL-3R3 ☐	3.30	1.00	0.435	0.98	0.90
GTLQH20PL-4R7 ☐	4.70	1.00	0.590	0.82	0.72
GTLQH20PL-5R6 ☐	5.60	1.00	0.740	0.74	0.68
GTLQH20PL-6R8 ☐	6.80	1.00	0.840	0.67	0.62
GTLQH20PL-100 ☐	10.00	1.00	1.200	0.58	0.58
GTLQH20PL-150 ☐	15.00	1.00	1.800	0.41	0.43
GTLQH20PL-220 ☐	22.00	1.00	2.680	0.38	0.40

L value Tolerance: M=20% N=30%
Isat : Inductance drop 10% from its value without current.
Irms : for a 40 deg.C rise above 25 deg.C ambient.

We custom design all L.value series....

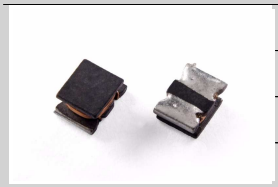


Product Series Code	**GTLQH**	Brand	GOTREND
File Version	GTLQH-V4R4	Editor	Teddy
Established Date	2009.07.09	Description	Ferrite Core Wound Inductor - Murxta LQH Series Compatiable
Latest Edit Date	2013.02.23		

Part No.	L(uH) Tolerance 10%	Test Freq. KHz	DCR ohm (max)	I DC (A) (max)
GTLQH20P-R10M	0.10	100.00	0.018	4.24
GTLQH20P-R12M	0.12	100.00	0.022	3.97
GTLQH20P-R15M	0.15	100.00	0.023	3.87
GTLQH20P-R18M	0.18	100.00	0.029	3.10
GTLQH20P-R22M	0.22	100.00	0.034	3.07
GTLQH20P-R27M	0.27	100.00	0.042	2.46
GTLQH20P-R33M	0.33	100.00	0.048	2.07
GTLQH20P-R39M	0.39	100.00	0.059	1.61
GTLQH20P-R47M	0.47	100.00	0.068	1.53
GTLQH20P-R56M	0.56	100.00	0.091	1.48
GTLQH20P-R68M	0.68	100.00	0.101	1.37
GTLQH20P-R82M	0.82	100.00	0.116	1.28
GTLQH20P-1R0M	1.00	100.00	0.160	0.75
GTLQH20P-1R5M	1.50	100.00	0.247	0.70
GTLQH20P-2R0M	2.00	100.00	0.300	0.65
GTLQH20P-2R2M	2.20	100.00	0.330	0.61
GTLQH20P-2R7M	2.70	100.00	0.360	0.55
GTLQH20P-3R3M	3.30	100.00	0.500	0.50
GTLQH20P-3R9M	3.90	100.00	0.700	0.49
GTLQH20P-4R7M	4.70	100.00	0.740	0.47
GTLQH20P-6R8M	6.80	100.00	0.970	0.45
GTLQH20P-8R2M	8.20	100.00	1.490	0.40
GTLQH20P-100M	10.00	1.00	1.620	0.37
GTLQH20P-120M	12.00	1.00	1.890	0.34
GTLQH20P-150M,K	15.00	1.00	2.170	0.32
GTLQH20P-220M,K	22.00	1.00	3.420	0.25
GTLQH20P-270M,K	27.00	1.00	4.280	0.21
GTLQH20P-330M,K	33.00	1.00	5.470	0.20
GTLQH20P-390M,K	39.00	1.00	6.290	0.17
GTLQH20P-470M,K	47.00	1.00	9.870	0.13
GTLQH20P-680M,K	68.00	1.00	12.170	0.11
GTLQH20P-820M,K	82.00	1.00	14.500	0.09
GTLQH20P-101M,K	100.00	1.00	19.620	0.08
GTLQH20P-121M,K	120.00	1.00	22.030	0.02

L value Tolerance: K=10% M=20%

We custom design all L.value series....

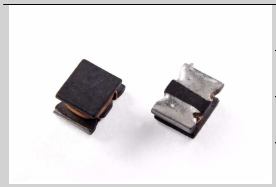


Product Series Code	**GTLQH**	Brand	GOTREND
File Version	GTLQH-V4R4	Editor	Teddy
Established Date	2009.07.09	Description	Ferrite Core Wound Inductor - Murxta LQH Series Compatiable
Latest Edit Date	2013.02.23		

Part No.	L (uH)	Test Freq. (MHz / 0.2V)	DCR ohm (max)	Isat (A) (typ)	Irms (A) (typ)
GTLQH25PL-1R0 ☐	1.00	1.00	0.150	2.00	1.90
GTLQH25PL-1R5 ☐	1.50	1.00	0.190	1.80	1.64
GTLQH25PL-2R2 ☐	2.20	1.00	0.300	1.40	1.60
GTLQH25PL-3R3 ☐	3.30	1.00	0.390	1.20	1.10
GTLQH25PL-4R7 ☐	4.70	1.00	0.510	1.00	1.02
GTLQH25PL-5R6 ☐	5.60	1.00	0.630	0.96	0.88
GTLQH25PL-6R8 ☐	6.80	1.00	0.790	0.84	0.82
GTLQH25PL-100 ☐	10.00	1.00	1.050	0.70	0.74
GTLQH25PL-220 ☐	22.00	1.00	2.400	0.49	0.46

L value Tolerance: M=20% N=30%
Isat : Inductance drop 10% from its value without current.
Irms : for a 40 deg.C rise above 25 deg.C ambient.

We custom design all L.value series....

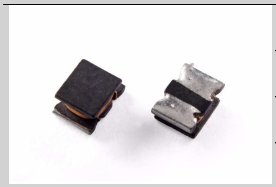


Product Series Code	**GTLQH**	Brand	GOTREND
File Version	GTLQH-V4R4	Editor	Teddy
Established Date	2009.07.09	Description	Ferrite Core Wound Inductor - Murxta LQH Series Compatiable
Latest Edit Date	2013.02.23		

Part No.	L(uH) @1KHz/0.25V	L+/-% (best)	DCR (ohm) (Max)	I DC (mA) (max)
GTLQH25P-R22M	0.22	20	0.032	350
GTLQH25P-R39M	0.39	20	0.042	330
GTLQH25P-1R0M	1.00	20	0.078	300
GTLQH25P-1R2M	1.20	20	0.090	290
GTLQH25P-1R5M	1.50	20	0.100	280
GTLQH25P-1R8M	1.80	20	0.110	270
GTLQH25P-2R2M	2.20	20	0.120	250
GTLQH25P-2R7M	2.70	20	0.200	240
GTLQH25P-3R3M	3.30	20	0.240	230
GTLQH25P-3R9M	3.90	20	0.280	220
GTLQH25P-4R7M	4.70	20	0.300	210
GTLQH25P-5R6M	5.60	20	0.340	205
GTLQH25P-6R8M	6.80	20	0.440	200
GTLQH25P-8R2M	8.20	20	0.590	195
GTLQH25P-100M,K	10.00	10 or 20	0.680	190
GTLQH25P-120M,K	12.00	10 or 20	0.770	185
GTLQH25P-150M,K	15.00	10 or 20	0.870	180
GTLQH25P-180M,K	18.00	10 or 20	1.200	175
GTLQH25P-220M,K	22.00	10 or 20	1.340	170
GTLQH25P-270M,K	27.00	10 or 20	1.860	165
GTLQH25P-330M,K	33.00	10 or 20	2.100	160
GTLQH25P-390M,K	39.00	10 or 20	2.350	155
GTLQH25P-470M,K	47.00	10 or 20	3.300	150
GTLQH25P-560M,K	56.00	10 or 20	3.700	145
GTLQH25P-680M,K	68.00	10 or 20	6.000	135
GTLQH25P-820M,K	82.00	10 or 20	6.900	125
GTLQH25P-101M,K	100.00	10 or 20	7.750	110
GTLQH25P-221M,K	220.00	10 or 20	13.420	90

L value Tolerance: J=5% , K=10% , M=20%

We custom design all L.value series....

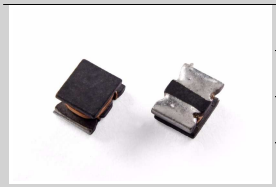


Product Series Code	**GTLQH**	Brand	GOTREND
File Version	GTLQH-V4R4	Editor	Teddy
Established Date	2009.07.09	Description	Ferrite Core Wound Inductor - Murxta LQH Series Compatiable
Latest Edit Date	2013.02.23		

Part No.	L(uH) @1.0MHz	L+/-% (best)	Q (Ref.) Test @KHz Freq.	DCR (ohm) (Max)	SRF (MHz) (min)	I DC (mA) (max)
GTLQH31P-R10M	0.10	20	10@2520	0.11	200.0	185
GTLQH31P-R12M	0.12	20	10@2520	0.13	200.0	184
GTLQH31P-R22M	0.22	20	10@2520	0.14	200.0	183
GTLQH31P-R29M	0.29	20	10@2520	0.15	200.0	182
GTLQH31P-R47M	0.47	20	10@2520	0.17	200.0	178
GTLQH31P-R50M	0.50	20	10@2520	0.18	160.0	172
GTLQH31P-1R0M	1.00	20	10@1000	0.49	100.0	175
GTLQH31P-1R2M	1.20	20	10@1000	0.50	100.0	165
GTLQH31P-1R5M	1.50	20	10@1000	0.52	75.0	155
GTLQH31P-1R8M	1.80	20	10@1000	0.53	60.0	150
GTLQH31P-2R2M	2.20	20	10@1000	0.54	50.0	140
GTLQH31P-2R7K	2.70	10	10@1000	0.55	43.0	135
GTLQH31P-3R3K	3.30	10	10@1000	0.61	38.0	130
GTLQH31P-3R9K	3.90	10	10@1000	1.50	35.0	125
GTLQH31P-4R7K	4.70	10	20@1000	1.70	31.0	120
GTLQH31P-5R6K	5.60	10	20@1000	1.80	28.0	115
GTLQH31P-6R8K	6.80	10	20@1000	2.00	25.0	110
GTLQH31P-8R2K	8.20	10	20@1000	2.20	23.0	105
GTLQH31P-100K	10.00	10	25@1000	2.50	20.0	100
GTLQH31P-110K	11.00	10	25@1000	2.60	20.0	97
GTLQH31P-120K	12.00	10	25@1000	2.70	18.0	95
GTLQH31P-150K	15.00	10	25@1000	2.90	16.0	90
GTLQH31P-180K	18.00	10	25@1000	3.00	15.0	85
GTLQH31P-220K	22.00	10	25@1000	3.10	14.0	85
GTLQH31P-270K	27.00	10	25@1000	3.40	13.0	85
GTLQH31P-330K	33.00	10	25@1000	3.80	12.0	80
GTLQH31P-390K	39.00	10	25@1000	4.50	11.0	85
GTLQH31P-470K	47.00	10	25@1000	6.30	11.0	85
GTLQH31P-560J	56.00	5	25@1000	7.10	10.0	50
GTLQH31P-680J	68.00	5	25@1000	7.90	9.0	50
GTLQH31P-820J	82.00	5	25@1000	8.70	8.5	45
GTLQH31P-101J	100.00	5	30@796	11.57	8.0	45
GTLQH31P-111J	110.00	5	30@796	13.00	8.0	25
GTLQH31P-121J	120.00	5	30@796	14.20	7.5	20
GTLQH31P-151J	150.00	5	30@796	15.03	7.0	15
GTLQH31P-181J	180.00	5	30@796	16.60	6.0	13
GTLQH31P-221J	220.00	5	30@796	26.46	5.5	12
GTLQH31P-271J	270.00	5	30@796	29.70	5.0	11
GTLQH31P-331J	330.00	5	30@796	43.06	5.0	10
GTLQH31P-391J	390.00	5	30@796	22.00	5.0	9
GTLQH31P-471J	470@1KHZ	5	30@796	53.50	5.0	8
GTLQH31P-821J	820@1KHZ	5	30@796	66.10	5.0	5

L value Tolerance: J=5% , K=10% , M=20%

We custom design all L.value series....

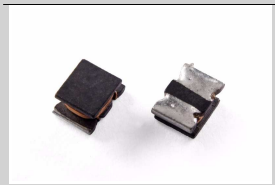


Product Series Code	**GTLQH**	Brand	GOTREND
File Version	GTLQH-V4R4	Editor	Teddy
Established Date	2009.07.09	Description	Ferrite Core Wound Inductor - Murxta LQH Series Compatiable
Latest Edit Date	2013.02.23		

Part No.	L(uH) @1.0MHz	L+/-% (best)	Q (Ref.) Test @KHz Freq.	DCR (ohm) (Max)	SRF (MHz) (min)	I DC (mA) (max)
GTLQH32P-R10M	0.10	20	10@2520	0.25	200.0	700
GTLQH32P-R18M	0.18	20	10@2520	0.25	200.0	650
GTLQH32P-R27M	0.27	20	10@2520	0.25	200.0	600
GTLQH32P-R33M	0.33	20	10@2520	0.25	200.0	550
GTLQH32P-R39M	0.39	20	10@2520	0.25	200.0	530
GTLQH32P-R56M	0.56	20	10@2520	0.25	160.0	530
GTLQH32P-R68M	0.68	20	10@2520	0.25	160.0	470
GTLQH32P-R82M	0.82	20	10@2520	0.25	120.0	450
GTLQH32P-1R0M	1.00	20	10@1000	0.50	100.0	445
GTLQH32P-1R2M	1.20	20	10@1000	0.60	100.0	425
GTLQH32P-1R5M	1.50	20	10@1000	0.60	75.0	400
GTLQH32P-1R8M	1.80	20	10@1000	0.70	60.0	390
GTLQH32P-2R2M	2.20	20	10@1000	0.80	50.0	370
GTLQH32P-2R7K	2.70	10	10@1000	0.90	43.0	320
GTLQH32P-3R3K	3.30	10	10@1000	1.00	38.0	300
GTLQH32P-3R9K	3.90	10	10@1000	1.10	35.0	290
GTLQH32P-4R7K	4.70	10	20@1000	1.20	31.0	270
GTLQH32P-5R6K	5.60	10	20@1000	1.30	28.0	250
GTLQH32P-6R8K	6.80	10	20@1000	1.50	25.0	240
GTLQH32P-8R2K	8.20	10	20@1000	1.60	23.0	225
GTLQH32P-100K	10.00	10	25@1000	1.80	20.0	190
GTLQH32P-120K	12.00	10	25@1000	2.00	18.0	180
GTLQH32P-150K	15.00	10	25@1000	2.20	16.0	170
GTLQH32P-180K	18.00	10	25@1000	2.50	15.0	160
GTLQH32P-220K	22.00	10	25@1000	2.80	14.0	150
GTLQH32P-270K	27.00	10	25@1000	3.10	13.0	125
GTLQH32P-330K	33.00	10	25@1000	3.50	12.0	115
GTLQH32P-390K	39.00	10	25@1000	3.90	11.0	110
GTLQH32P-470K	47.00	10	25@1000	4.30	11.0	100
GTLQH32P-560J	56.00	5	25@1000	4.90	10.0	85
GTLQH32P-680J	68.00	5	25@1000	5.50	9.0	80
GTLQH32P-820J	82.00	5	25@1000	6.20	8.5	80
GTLQH32P-101J	100.00	5	30@796	7.00	8.0	80
GTLQH32P-121J	120.00	5	30@796	8.00	7.5	75
GTLQH32P-151J	150.00	5	30@796	9.30	7.0	70
GTLQH32P-181J	180.00	5	30@796	10.20	6.0	65
GTLQH32P-221J	220.00	5	30@796	11.80	5.5	65
GTLQH32P-271J	270.00	5	30@796	12.50	5.0	65
GTLQH32P-331J	330.00	5	30@796	13.00	5.0	65
GTLQH32P-391J	390.00	5	30@796	22.00	5.0	50
GTLQH32P-471J	470@1KHZ	5	30@796	25.00	5.0	45
GTLQH32P-501J	500@1KHZ	5	30@796	27.00	5.0	42
GTLQH32P-561J	560@1KHZ	5	30@796	28.00	5.0	40
GTLQH32P-681J	680@1KHZ	5	30@796	30.00	5.0	35
GTLQH32P-102J	1000@1KHZ	5	30@796	39.20	5.0	30

L value Tolerance: J=5% , K=10% , M=20%

We custom design all L.value series....



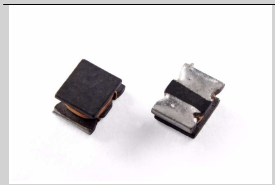
Product Series Code	**GTLQH**	Brand	GOTREND
File Version	GTLQH-V4R4	Editor	Teddy
Established Date	2009.07.09	Description	Ferrite Core Wound Inductor - Murxta LQH Series Compatiable
Latest Edit Date	2013.02.23		

High-Current Series....

Part No.	L(uH)	L.+/-% (best)	L-Test @ Freq.	DCR (Ohm) (Max)	SRF (MHz) (Min / Typ)	IDC (mA) (max)
GTLQH32PC-R47M-T	0.47	20	1.0MHz	0.038	100 / 200	2,290
GTLQH32PC-1R0M-T	1.0	20	1.0MHz	0.078	100 / 200	1,000
GTLQH32PC-2R2M-T	2.2	20	1.0MHz	0.126	64 / 120	790
GTLQH32PC-4R7M-T	4.7	20	1.0MHz	0.195	43 / 77	650
GTLQH32PC-100K -T	10.0	10	1.0MHz	0.390	26 / 50	450
GTLQH32PC-1R0M	1.0	20	1.0MHz	0.117	100 / 150	800
GTLQH32PC-1R8M	1.8	20	1.0MHz	0.140	64 / 100	780
GTLQH32PC-2R2M	2.2	20	1.0MHz	0.169	64 / 100	600
GTLQH32PC-3R3M	3.3	20	1.0MHz	0.180	54 / 100	500
GTLQH32PC-4R7M	4.7	20	1.0MHz	0.260	43 / 66	450
GTLQH32PC-6R8M	6.8	20	1.0MHz	0.350	30 / 45	380
GTLQH32PC-100K	10.0	10	1.0MHz	0.572	26 / 40	300
GTLQH32PC-220K	22.0	10	1.0MHz	0.923	19 / 27	250
GTLQH32PC-330K	33.0	10	1.0MHz	1.350	17 / 22	220
GTLQH32PC-470K	47.0	10	1.0MHz	1.690	15 / 19	170
GTLQH32PC-101K	100.0	10	1.0MHz	4.550	10 / 13	100
GTLQH32PC-221K	220.0	10	1.0MHz	10.920	6.8 / 8.5	70
GTLQH32PC-331K	330.0	10	1.0MHz	13.000	5.6 / 7.0	60
GTLQH32PC-391K	390.0	10	1.0MHz	22.100	5 / 6.6	60
GTLQH32PC-471K	470.0	10	1.0KHz	24.700	5 / 6.2	60
GTLQH32PC-561K	560.0	10	1.0KHz	28.600	5 / 5.7	60

* Attention: This 3225 size Part No wtih " T" means note Low DCR
L value Tolerance: K=10% , M=20%

We custom design all L.value series....

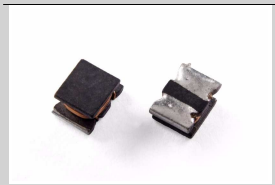


Product Series Code	**GTLQH**	Brand	GOTREND
File Version	GTLQH-V4R4	Editor	Teddy
Established Date	2009.07.09	Description	Ferrite Core Wound Inductor - Murxta LQH Series Compatiable
Latest Edit Date	2013.02.23		

Part No.	L(uH) @1.0KHz,0.25V	L+/-% (best)	DCR (ohm) (Max)	I DC (A)(max) △L/L(0A)=10%
GTLQH32PL-1R0 ☐	1.00@100KHZ	20	0.060	1.480
GTLQH32PL-1R4 ☐	1.40 @100KHZ	20	0.079	1.380
GTLQH32PL-1R8 ☐	1.80 @100KHZ	20	0.101	1.310
GTLQH32PL-2R2 ☐	2.20 @100KHZ	20	0.125	1.250
GTLQH32PL-3R3 ☐	3.30 @100KHZ	20	0.160	1.080
GTLQH32PL-4R7 ☐	4.70 @100KHZ	20	0.236	0.980
GTLQH32PL-5R6 ☐	5.60 @100KHZ	20	0.287	0.900
GTLQH32PL-6R8 ☐	6.80 @100KHZ	20	0.371	0.790
GTLQH32PL-8R2 ☐	8.20 @100KHZ	20	0.471	0.720
GTLQH32PL-100 ☐	10.00	10	0.576	0.660
GTLQH32PL-120 ☐	12.00	10	0.684	0.590
GTLQH32PL-150 ☐	15.00	10	0.888	0.540
GTLQH32PL-180 ☐	18.00	10	1.087	0.480
GTLQH32PL-220 ☐	22.00	10	1.343	0.430
GTLQH32PL-330 ☐	33.00	10	2.245	0.350
GTLQH32PL-470 ☐	47.00	10	3.064	0.290
GTLQH32PL-560 ☐	56.00	10	4.120	0.270
GTLQH32PL-680 ☐	68.00	10	5.289	0.240
GTLQH32PL-820 ☐	82.00	10	7.223	0.200
GTLQH32PL-101 ☐	100.00	10	8.209	0.190
GTLQH32PL-121 ☐	120.00	10	10.888	0.170
GTLQH32PL-151 ☐	150.00	10	12.568	0.160
GTLQH32PL-181 ☐	180.00	10	19.645	0.140
GTLQH32PL-221 ☐	220.00	10	22.307	0.130
GTLQH32PL-271 ☐	270.00	10	24.613	0.120
GTLQH32PL-331 ☐	330.00	10	28.213	0.110
GTLQH32PL-391 ☐	390.00	10	32.187	0.100
GTLQH32PL-471 ☐	470.00	10	48.747	0.090
GTLQH32PL-561 ☐	560.00	5	53.893	0.080
GTLQH32PL-681 ☐	680.00	5	63.013	0.070

L value Tolerance: J=5% , K=10% , M=20%

We custom design all L.value series....



Product Series Code	**GTLQH**	Brand	GOTREND
File Version	GTLQH-V4R4	Editor	Teddy
Established Date	2009.07.09	Description	Ferrite Core Wound Inductor - Murxta LQH Series Compatiable
Latest Edit Date	2013.02.23		

Part No.	L(uH) @1.0MHz	L+/-% (best)	DCR (ohm) (max)	IDC (mA) (max)
GTLQH43PC-1R0 ☐	1.00	20	0.08	1,080
GTLQH43PC-1R5 ☐	1.50	20	0.09	1,000
GTLQH43PC-2R2 ☐	2.20	20	0.11	900
GTLQH43PC-3R3 ☐	3.30	20	0.13	800
GTLQH43PC-4R7 ☐	4.70	20	0.15	750
GTLQH43PC-6R8 ☐	6.80	20	0.20	720
GTLQH43PC-100 ☐	10.00	10	0.24	650
GTLQH43PC-150 ☐	15.00	10	0.32	570
GTLQH43PC-220 ☐	22.00	10	0.60	420
GTLQH43PC-330 ☐	33.00	10	1.00	310
GTLQH43PC-470 ☐	47.00	10	1.10	280
GTLQH43PC-560 ☐	56.00	10	1.34	260
GTLQH43PC-680 ☐	68.00	10	1.70	220
GTLQH43PC-101 ☐	100.00	5	2.20	190
GTLQH43PC-151 ☐	150.00	5	3.50	130
GTLQH43PC-221 ☐	220.00	5	4.00	110
GTLQH43PC-331 ☐	330.00	5	6.80	100
GTLQH43PC-471 ☐	470.00	5	8.50	90

L value Tolerance: J=5% , K=10% , M=20%

We custom design all L.value series....

Part No.	L(uH) @1.0MHz	L+/-% (best)	DCR (ohm) (max)	IDC (mA) (max)
GTLQH56P-R12 ☐	0.12	30	10.00	6,000
GTLQH56P-R27 ☐	0.27	30	14.00	5,300
GTLQH56P-R47 ☐	0.47	30	18.00	4,800
GTLQH56P-1R0 ☐	1.00	30	27.00	4,000
GTLQH56P-1R5 ☐	1.50	20	31.00	3,700
GTLQH56P-2R2 ☐	2.20	20	41.00	3,200
GTLQH56P-3R3 ☐	3.30	20	50.00	2,900
GTLQH56P-4R7 ☐	4.70	20	57.00	2,700
GTLQH56P-6R8 ☐	6.80	20	0.10	2,000
GTLQH56P-100 ☐	10.00	10	0.13	1,700
GTLQH56P-120 ☐	12.00	10	0.20	1,500
GTLQH56P-150 ☐	15.00	10	0.21	1,400
GTLQH56P-220 ☐	22.00	10	0.27	1,200
GTLQH56P-240 ☐	24.00	10	0.29	1,100
GTLQH56P-270 ☐	27.00	10	0.30	1.000
GTLQH56P-330 ☐	33.00	10	0.45	900
GTLQH56P-470 ☐	47.00	10	0.56	800
GTLQH56P-680 ☐	68.00	10	0.94	640
GTLQH56P-101 ☐	100.00	10	1.20	560
GTLQH56P-151 ☐	150.00	10	2.66	420
GTLQH56P-221 ☐	220.00	10	3.36	320
GTLQH56P-331 ☐	330.00	10	6.16	270

L value Tolerance: K=10% , M=20%,N=30%

We custom design all L.value series....

Product Series Code	**GTW**	Brand	GOTREND
File Version	GTW-V3R4	Editor	Teddy
Established Date	2000.09.28	Description	Ferrite Core Wound Molding Inductor
Latest Edit Date	2013.03.13		

Features & Application:

* Molding Wound Chip Inductor

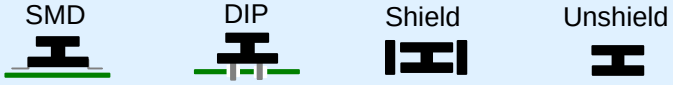
* Fit for power line & signal line circuit

* To help you go pass the CE/FCC standard.

* Mobile Device / Handheld Device / LowProfile Device / Panel...

Product Structure

SMD | DIP | Shield | Unshield



2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example:

GTW 2520 F P - 6R8 J

1 2 3 4 5 6

1. GOTREND SERIES : GTW

2. Dimension Code: 2520 [2.5 x 2.0 mm]

3. F : Special molding Type

4. P=Pb free <1000ppm

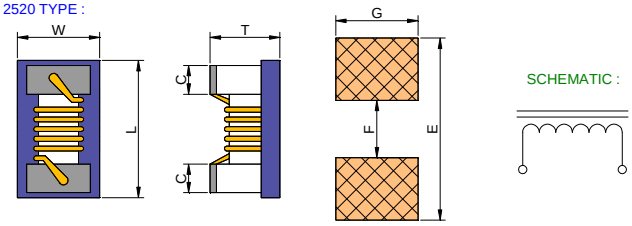
5. [L] Value : Inductance 6R8=6.8uH

6. Tolerance: J=5%, K=10%,

DIMENSION : [mm]

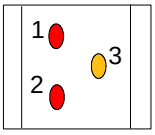
Recommend Pad Layout [mm]

2520 TYPE :



TYPE	A [+/-0.3]	B [+/-0.3]	C [+/-0.3]	D [+/-0.15]	E [Ref.]	F [Ref.]	G [Ref.]
2520	2.70	2.50	2.00	0.50	3.30	1.25	2.60

2520 SIZE - Marking Expression:



0 1 2 3 4 5 6 7 8 9

黑 棕 紅 橙 黃 綠 藍 紫 灰 白

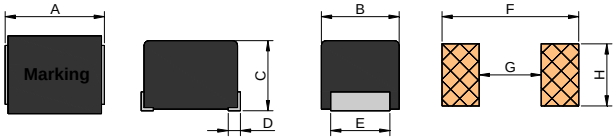
料號色碼依下列算法計之.....

For inductance meanning:
[(1st dot x10)+2 nd dot]x10 3 rd dot=nH
for example:
GTH-2520S-220J Color Dot=紅 1st 紅 2nd 橙 3rd
Inductance= [(紅 2) x 10 + (紅 2)] x (橙)10x100)
=22x1000=22000nH
22000 ÷ 1000 = 22uH

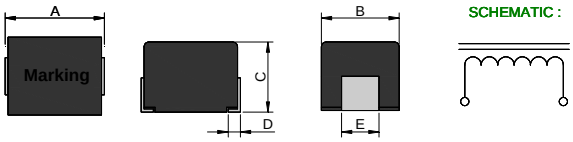
DIMENSION : [mm]

Recommend Pad Layout [mm]

3225 TYPE :



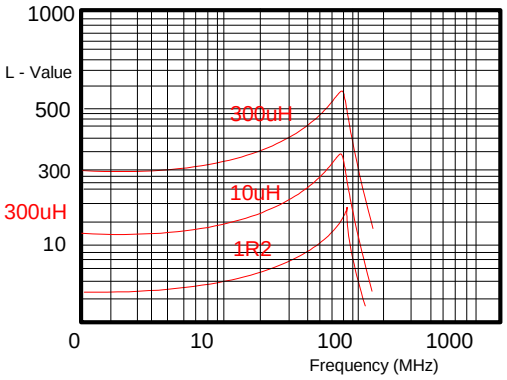
2520F / 4532 TYPE :



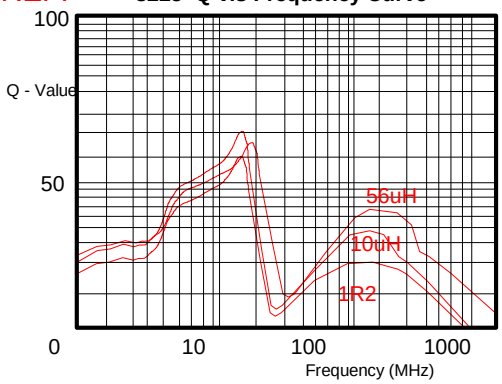
TYPE	A [+/-0.3]	B [+/-0.3]	C [+/-0.3]	D [+/-0.1]	E [+/-0.1]	F [Ref.]	G [Ref.]	H [Ref.]
2520F	2.50	2.00	1.80	0.50	1.20	3.50	1.50	1.50
3225	3.20	2.50	2.20	0.50	1.90	3.50	1.00	3.00
4532	4.50	3.20	3.20	1.00	1.20	5.50	2.00	4.00

Product Series Code	**GTW**	Brand	GOTREND
File Version	GTW-V3R4	Editor	Teddy
Established Date	2000.09.28	Description	Ferrite Core Wound Molding Inductor
Latest Edit Date	2013.03.13		

REF. **3225 L v.s Frequency Curve**



REF. **3225 Q v.s Frequency Curve**

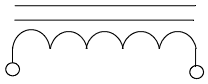


Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15ºC
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5ºC
Relative Humidity:75+/-10%

SCHEMATIC:



Operating & Storage Condition:

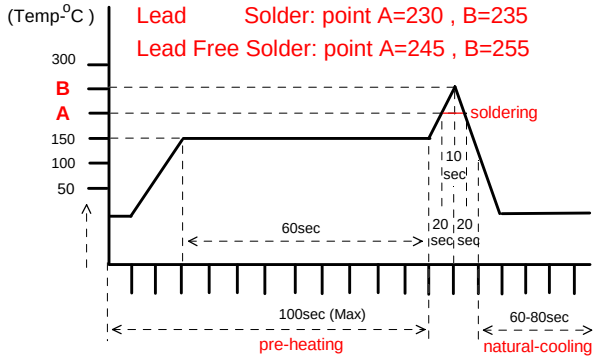
OPERATING TEMP:-40~+85ºC

STORAGE TEMP:-40~+85ºC
STORAGE LIFE TIME: 12 MONTH @25ºC , RH 65%

Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260° C

Product Series Code	**GTW**	Brand	GOTREND
File Version	GTW-V3R4	Editor	Teddy
Established Date	2000.09.28	Description	Ferrite Core Wound Molding Inductor
Latest Edit Date	2013.03.13		

Part No.	L - Value (uH)	Tolerance of L.value J=5%,K=10%	Q value (min)	L&Q Test Freq. (MHz)	S.R.F (MHz) (min)	DCR (Ohm) (max)	IDC (mA) (max)
GTW2520P-5N0 ☐	0.005	K	10	100	3000	0.25	2000
GTW2520P-10N ☐	0.010	K	10	100	2500	0.25	1800
GTW2520P-12N ☐	0.012	K	15	100	2400	0.26	1700
GTW2520P-15N ☐	0.015	K	15	100	2300	0.28	1600
GTW2520P-18N ☐	0.018	K	15	100	2200	0.30	1550
GTW2520P-22N ☐	0.022	J,K	20	100	2100	0.35	1500
GTW2520P-27N ☐	0.027	J,K	20	100	2000	0.40	1450
GTW2520P-33N ☐	0.033	J,K	30	100	1600	0.42	1400
GTW2520P-39N ☐	0.039	J,K	35	100	1500	0.45	1350
GTW2520P-47N ☐	0.047	J,K	35	100	1400	0.50	1300
GTW2520P-56N ☐	0.056	J,K	35	100	1300	0.60	1250
GTW2520P-68N ☐	0.068	J,K	35	100	1200	0.65	1240
GTW2520P-82N ☐	0.082	J,K	35	100	1100	0.75	1230
GTW2520P-R10 ☐	0.100	J,K	35	100	800	0.80	1220
GTW2520P-R12 ☐	0.120	J,K	30	25.2	700	0.30	900
GTW2520P-R15 ☐	0.150	J,K	30	25.2	550	0.35	900
GTW2520P-R18 ☐	0.180	J,K	30	25.2	500	0.40	850
GTW2520P-R22 ☐	0.220	J,K	30	25.2	450	0.50	840
GTW2520P-R27 ☐	0.270	J,K	30	25.2	425	0.55	830
GTW2520P-R33 ☐	0.330	J,K	30	25.2	400	0.60	820
GTW2520P-R39 ☐	0.390	J,K	30	25.2	375	0.65	810
GTW2520P-R47 ☐	0.470	J,K	30	25.2	350	0.68	800
GTW2520P-R56 ☐	0.560	J,K	30	25.2	325	0.75	800
GTW2520P-R68 ☐	0.680	J,K	30	25.2	300	0.85	800
GTW2520P-R82 ☐	0.820	J,K	30	25.2	260	1.00	800
GTW2520P-1R0 ☐	1.000	J,K	25	7.96	245	1.10	800
GTW2520P-1R2 ☐	1.200	J,K	25	7.96	230	1.20	790
GTW2520P-1R5 ☐	1.500	J,K	25	7.96	182	1.30	750
GTW2520P-1R8 ☐	1.800	J,K	25	7.96	135	1.45	750
GTW2520P-2R2 ☐	2.200	J,K	25	7.96	105	1.55	750
GTW2520P-2R7 ☐	2.700	J,K	25	7.96	70	1.70	740
GTW2520P-3R3 ☐	3.300	J,K	25	7.96	55	1.90	730
GTW2520P-3R9 ☐	3.900	J,K	25	7.96	48	2.10	700
GTW2520P-4R7 ☐	4.700	J,K	25	7.96	43	2.30	650
GTW2520P-5R6 ☐	5.600	J,K	20	7.96	42	2.50	640
GTW2520P-6R8 ☐	6.800	J,K	20	7.96	39	2.70	630
GTW2520P-8R2 ☐	8.200	J,K	20	7.96	36	3.05	600
GTW2520P-100 ☐	10.000	J,K	15	2.52	33	3.50	680
GTW2520P-120 ☐	12.000	J,K	15	2.52	30	3.80	650
GTW2520P-150 ☐	15.000	J,K	15	2.52	26	4.40	500
GTW2520P-180 ☐	18.000	J,K	15	2.52	24	4.80	450
GTW2520P-220 ☐	22.000	J,K	15	2.52	22	5.50	450
GTW2520P-270 ☐	27.000	J,K	15	2.52	21	6.30	430
GTW2520P-330 ☐	33.000	J,K	15	2.52	20	7.10	380
GTW2520P-390 ☐	39.000	J,K	10	2.52	18	9.50	330
GTW2520P-470 ☐	47.000	J,K	10	2.52	17	11.10	300
GTW2520P-560 ☐	56.000	J,K	10	2.52	16	12.10	270
GTW2520P-680 ☐	68.000	J,K	10	2.52	15	16.60	250
GTW2520P-820 ☐	82.000	J,K	10	2.52	13	19.00	200
GTW2520P-101 ☐	100.000	J,K	8	0.796	12	21.00	120

Product Series Code	GTW	Brand	GOTREND
File Version	GTW-V3R4	Editor	Teddy
Established Date	2000.09.28	Description	Ferrite Core Wound Molding Inductor
Latest Edit Date	2013.03.13		

Part No.	L - Value (uH)	Tolerance of L.value J=5%,K=10%	Q value (min)	L&Q Test Freq. (MHz)	S.R.F (MHz) (min)	DCR (Ohm) (max)	IDC (mA) (max)
GTW2520FP-R22 ☐	0.220	J,K	25	25.2	230	0.50	430
GTW2520FP-R27 ☐	0.220	J,K	25	25.2	210	0.55	420
GTW2520FP-R33 ☐	0.330	J,K	25	25.2	190	0.60	400
GTW2520FP-R39 ☐	0.390	J,K	25	25.2	175	0.65	375
GTW2520FP-R47 ☐	0.470	J,K	25	25.2	160	0.68	350
GTW2520FP-R56 ☐	0.560	J,K	25	25.2	150	0.75	325
GTW2520FP-R68 ☐	0.680	J,K	25	25.2	135	0.85	300
GTW2520FP-R82 ☐	0.820	J,K	25	25.2	125	1.00	260
GTW2520FP-1R0 ☐	1.000	J,K	30	7.96	115	1.10	245
GTW2520FP-1R2 ☐	1.200	J,K	30	7.96	100	1.20	230
GTW2520FP-1R5 ☐	1.500	J,K	30	7.96	90	1.30	220
GTW2520FP-1R8 ☐	1.800	J,K	30	7.96	85	1.45	210
GTW2520FP-2R2 ☐	2.200	J,K	30	7.96	75	1.55	200
GTW2520FP-2R7 ☐	2.700	J,K	30	7.96	55	1.70	195
GTW2520FP-3R3 ☐	3.300	J,K	30	7.96	48	1.90	185
GTW2520FP-3R9 ☐	3.900	J,K	30	7.96	43	2.10	180
GTW2520FP-4R7 ☐	4.700	J,K	30	7.96	40	2.30	175
GTW2520FP-5R6 ☐	5.600	J,K	25	7.96	36	2.50	170
GTW2520FP-6R8 ☐	6.800	J,K	25	7.96	33	2.70	165
GTW2520FP-8R2 ☐	8.200	J,K	25	7.96	30	3.05	160
GTW2520FP-100 ☐	10.000	J,K	25	2.52	27	3.50	155
GTW2520FP-120 ☐	12.000	J,K	25	2.52	23	3.80	150
GTW2520FP-150 ☐	15.000	J,K	25	2.52	20	4.40	140
GTW2520FP-180 ☐	18.000	J,K	25	2.52	18	4.80	130
GTW2520FP-220 ☐	22.000	J,K	25	2.52	17	5.50	125
GTW2520FP-270 ☐	27.000	J,K	25	2.52	16	6.30	115
GTW2520FP-330 ☐	33.000	J,K	25	2.52	15	7.10	110
GTW2520FP-390 ☐	39.000	J,K	20	2.52	14	9.50	90
GTW2520FP-470 ☐	47.000	J,K	20	2.52	13	11.00	80
GTW2520FP-560 ☐	56.000	J,K	20	2.52	12	12.10	75
GTW2520FP-680 ☐	68.000	J,K	20	2.52	11	16.60	70
GTW2520FP-820 ☐	82.000	J,K	20	2.52	10	19.00	66
GTW2520FP-101 ☐	100.000	J,K	15	0.796	9	21.00	60

Product Series Code	**GTW**	Brand	GOTREND
File Version	GTW-V3R4	Editor	Teddy
Established Date	2000.09.28	Description	Ferrite Core Wound Molding Inductor
Latest Edit Date	2013.03.13		

Part NO.	L - value (uH)	Tolerance of L.value J=5%,K=10%	Q value (min)	L&Q Test Freq. (MHz)	S.R.F (MHz) (min)	DCR (Ohm) (max)	IDC (mA) (max)
GTW3225P-R12 ☐	0.12	J,K	30	25.200	500	0.22	450
GTW3225P-R22 ☐	0.22	J,K	30	25.200	350	0.32	450
GTW3225P-R33 ☐	0.33	J,K	30	25.200	300	0.40	450
GTW3225P-R39 ☐	0.39	J,K	30	25.200	250	0.45	450
GTW3225P-R47 ☐	0.47	J,K	30	25.200	250	0.50	450
GTW3225P-R56 ☐	0.56	J,K	30	25.200	180	0.55	450
GTW3225P-R68 ☐	0.68	J,K	30	25.200	160	0.60	450
GTW3225P-R82 ☐	0.82	J,K	30	25.200	140	0.65	450
GTW3225P-1R0 ☐	1.00	J,K	30	7.960	120	0.70	400
GTW3225P-1R2 ☐	1.20	J,K	30	7.960	100	0.75	390
GTW3225P-1R5 ☐	1.50	J,K	30	7.960	85	0.85	370
GTW3225P-1R8 ☐	1.80	J,K	30	7.960	80	0.90	350
GTW3225P-2R2 ☐	2.20	J,K	30	7.960	75	1.00	320
GTW3225P-2R7 ☐	2.70	J,K	30	7.960	70	1.10	290
GTW3225P-3R3 ☐	3.30	J,K	30	7.960	60	1.20	260
GTW3225P-3R9 ☐	3.90	J,K	30	7.960	55	1.30	250
GTW3225P-4R7 ☐	4.70	J,K	30	7.960	50	1.50	220
GTW3225P-5R6 ☐	5.60	J,K	30	7.960	45	1.60	200
GTW3225P-6R8 ☐	6.80	J,K	30	7.960	40	1.80	180
GTW3225P-8R2 ☐	8.20	J,K	30	7.960	35	2.00	170
GTW3225P-100 ☐	10.00	J,K	30	2.520	30	2.10	150
GTW3225P-120 ☐	12.00	J,K	30	2.520	20	2.50	140
GTW3225P-150 ☐	15.00	J,K	30	2.520	20	2.80	130
GTW3225P-180 ☐	18.00	J,K	30	2.520	20	3.30	120
GTW3225P-220 ☐	22.00	J,K	30	2.520	20	3.70	110
GTW3225P-270 ☐	27.00	J,K	30	2.520	20	5.00	80
GTW3225P-330 ☐	33.00	J,K	30	2.520	17	5.60	70
GTW3225P-390 ☐	39.00	J,K	30	2.520	16	6.40	65
GTW3225P-470 ☐	47.00	J,K	30	2.520	15	7.00	60
GTW3225P-560 ☐	56.00	J,K	30	2.520	13	8.00	55
GTW3225P-680 ☐	68.00	J,K	30	2.520	12	9.00	50
GTW3225P-820 ☐	82.00	J,K	30	2.520	11	10.00	45
GTW3225P-101 ☐	100.00	J,K	20	0.796	10	11.00	40
GTW3225P-121 ☐	120.00	J,K	20	0.796	10	11.00	70
GTW3225P-151 ☐	150.00	J,K	20	0.796	8	15.00	65
GTW3225P-181 ☐	180.00	J,K	20	0.796	7	17.00	60
GTW3225P-221 ☐	220.00	J,K	20	0.796	7	21.00	50

Product Series Code	**GTW**	Brand	GOTREND
File Version	GTW-V3R4	Editor	Teddy
Established Date	2000.09.28	Description	Ferrite Core Wound Molding Inductor
Latest Edit Date	2013.03.13		

Part NO.	L - Value (uH)	Tolerance of L.value J=5%,K=10%	Q value (min)	L&Q Test Freq. (MHz)	S.R.F (MHz) (min)	DCR (Ohm) (max)	IDC (mA) (max)
GTW4532P-R10 ☐	0.10	J,K	35	25.200	300	0.18	800
GTW4532P-R12 ☐	0.12	J,K	35	25.200	280	0.20	770
GTW4532P-R15 ☐	0.15	J,K	35	25.200	250	0.22	730
GTW4532P-R18 ☐	0.18	J,K	35	25.200	220	0.24	700
GTW4532P-R22 ☐	0.22	J,K	40	25.200	200	0.25	665
GTW4532P-R27 ☐	0.27	J,K	40	25.200	180	0.26	635
GTW4532P-R33 ☐	0.33	J,K	40	25.200	165	0.28	605
GTW4532P-R39 ☐	0.39	J,K	40	25.200	150	0.30	575
GTW4532P-R47 ☐	0.47	J,K	40	25.200	145	0.32	545
GTW4532P-R56 ☐	0.56	J,K	40	25.200	140	0.36	520
GTW4532P-R68 ☐	0.68	J,K	40	25.200	135	0.40	500
GTW4532P-R82 ☐	0.82	J,K	40	25.200	130	0.45	475
GTW4532P-1R0 ☐	1.00	J,K	50	7.960	100	0.50	450
GTW4532P-1R2 ☐	1.20	J,K	50	7.960	80	0.55	430
GTW4532P-1R5 ☐	1.50	J,K	50	7.960	70	0.60	410
GTW4532P-1R8 ☐	1.80	J,K	50	7.960	60	0.65	390
GTW4532P-2R2 ☐	2.20	J,K	50	7.960	55	0.70	380
GTW4532P-2R7 ☐	2.70	J,K	50	7.960	50	0.75	370
GTW4532P-3R3 ☐	3.30	J,K	50	7.960	45	0.80	355
GTW4532P-3R9 ☐	3.90	J,K	50	7.960	40	0.90	330
GTW4532P-4R7 ☐	4.70	J,K	50	7.960	35	1.00	315
GTW4532P-5R6 ☐	5.60	J,K	50	7.960	33	1.10	300
GTW4532P-6R8 ☐	6.80	J,K	50	7.960	27	1.20	285
GTW4532P-8R2 ☐	8.20	J,K	50	7.960	25	1.40	270
GTW4532P-100 ☐	10.00	J,K	50	2.520	20	1.60	250
GTW4532P-120 ☐	12.00	J,K	50	2.520	18	2.00	225
GTW4532P-150 ☐	15.00	J,K	50	2.520	17	2.50	200
GTW4532P-180 ☐	18.00	J,K	50	2.520	15	2.80	190
GTW4532P-220 ☐	22.00	J,K	50	2.520	13	3.20	180
GTW4532P-270 ☐	27.00	J,K	50	2.520	12	3.60	170
GTW4532P-330 ☐	33.00	J,K	50	2.520	11	4.00	160
GTW4532P-390 ☐	39.00	J,K	50	2.520	10	4.50	150
GTW4532P-470 ☐	47.00	J,K	50	2.520	10	5.00	140
GTW4532P-560 ☐	56.00	J,K	50	2.520	9	5.50	135
GTW4532P-680 ☐	68.00	J,K	50	2.520	9	6.00	130
GTW4532P-820 ☐	82.00	J,K	50	2.520	8	7.00	120
GTW4532P-101 ☐	100.00	J,K	40	0.796	8	8.00	110
GTW4532P-121 ☐	120.00	J,K	40	0.796	6	8.00	110
GTW4532P-151 ☐	150.00	J,K	40	0.796	5	9.00	105
GTW4532P-181 ☐	180.00	J,K	40	0.796	5	9.50	102
GTW4532P-221 ☐	220.00	J,K	40	0.796	4	10.00	100
GTW4532P-271 ☐	270.00	J,K	40	0.796	4	12.00	92
GTW4532P-331 ☐	330.00	J,K	40	0.796	3.5	14.00	85
GTW4532P-391 ☐	390.00	J,K	40	0.796	3	18.00	80
GTW4532P-471 ☐	470.00	J,K	40	0.796	3	26.00	62
GTW4532P-561 ☐	560.00	J,K	30	0.796	3	30.00	50
GTW4532P-681 ☐	680.00	J,K	30	0.796	3	30.00	50
GTW4532P-821 ☐	820.00	J,K	30	0.796	2.5	35.00	30
GTW4532P-102 ☐	1000.00	J,K	30	0.252	2.5	40.00	30

Product Series Code	**GTC**	Brand	GOTREND
File Version	GTC-V2R5	Editor	Teddy
Established Date	2009.05.22	Description	Multilayer Ceramic High-Frequency Inductor
Latest Edit Date	2013.02.23		

Features & Application:

* High Frequency SRF up to 10GHz
* Fit for 2.4GHz / 5GHz....etc. RF circuit
* To help you go pass the CE/FCC standard.
* Mobile Device / Handheld Device / LowProfile Device / Panel...

Product Structure

SMD	DIP	Shield	Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

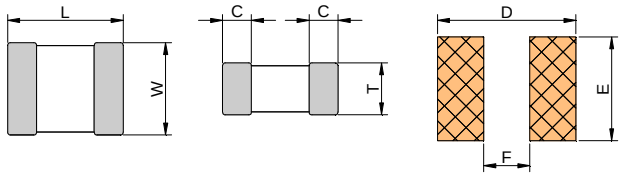
Part No Example:

GTC	1005	P -	1N2	S
1	2	3	4	5

1. GTC : GOTREND Series
2. 1005 : Diamension code- Length 1.0mm X Width 0.5mm
3. P : Pb free < 1000ppm
4. 1N2 : [L] Value - Inductance 1N2=1.2nH, 27N=27nH, R27=270nH
5. S : Tolerance Code - S = +/- 0.3 nH, J = 5%, K = 10% , M = 20%

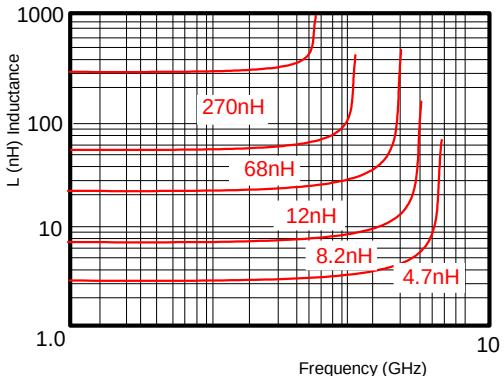
DIMENSION : [mm]

Front View | Side View | Recommend Pad Layout

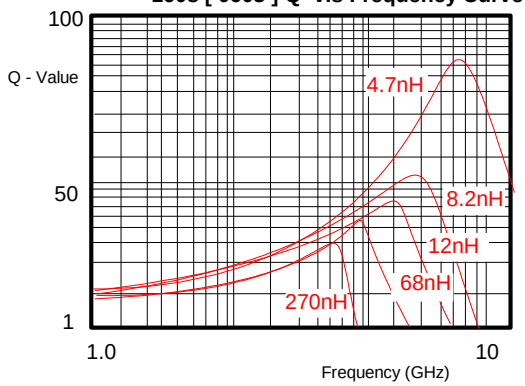


TYPE	L	W	T	C	D	E	F
1005 [0402]	1.00+/-0.15	0.50+/-0.20	0.50+/-0.15	0.15+/-0.10	1.20~1.40	0.40 ref.	0.40 ref.
1608 [0603]	1.60+/-0.15	0.80+/-0.15	0.80+/-0.15	0.25+/-0.10	2.40~3.40	0.60 ref.	0.80 ref.
2012 [0805]	2.00+/-0.20	1.20+/-0.20	0.90+/-0.20	0.30+/-0.15	3.00~4.00	1.00 ref.	1.20 ref.

EX. **1608 [0603] L v.s Frequency Curve**



EX. **1608 [0603] Q v.s Frequency Curve**

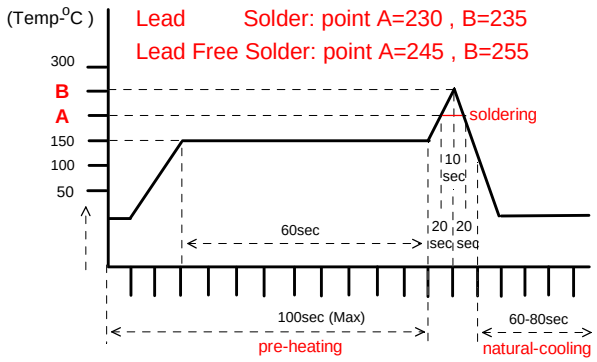


Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15°C
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:75+/-10%

Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260° C

Product Series Code	**GTC**	Brand	GOTREND
File Version	GTC-V2R5	Editor	Teddy
Established Date	2009.05.22	Description	Multilayer Ceramic High-Frequency Inductor
Latest Edit Date	2013.02.23		

Operating & Storage Condition:

OPERATING TEMP:-40~+85°C

STORAGE TEMP:-40~+85°C

STORAGE LIFE TIME: 12 MONTH @25°C , RH 65%

Attention & Caution:

Please avoid following matters:

* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Part No.	L - Value (nH) @100MHz	Tolerance of L.value	Q @100MHz (min)	Q Typcial @		S.R.F (MHz) Ref.	DCR (ohm) max	IDC (mA) max
				100MHz	800MHz			
GTC1005P-1N0S	1.0	+/-0.3nH	8	9	28	10000	0.10	300
GTC1005P-1N2S	1.2	+/-0.3nH	8	9	28	10000	0.10	300
GTC1005P-1N5S	1.5	+/-0.3nH	8	10	28	9000	0.10	300
GTC1005P-1N8S	1.8	+/-0.3nH	8	10	28	8700	0.12	300
GTC1005P-2N0S	2.0	+/-0.3nH	8	10	29	8100	0.15	300
GTC1005P-2N2S	2.2	+/-0.3nH	8	10	29	8100	0.15	300
GTC1005P-2N7S	2.7	+/-0.3nH	8	11	30	7700	0.15	300
GTC1005P-3N3 ☐	3.3	S / K	8	11	30	6300	0.16	300
GTC1005P-3N9 ☐	3.9	S / K	8	11	31	6100	0.21	300
GTC1005P-4N3 ☐	4.3	S / K	8	11	31	5400	0.21	300
GTC1005P-4N7 ☐	4.7	S / K	8	11	31	5400	0.21	300
GTC1005P-5N6 ☐	5.6	S / K	8	11	31	5100	0.23	300
GTC1005P-6N8 ☐	6.8	J / K	8	11	31	4550	0.25	250
GTC1005P-7N5 ☐	7.5	J / K	8	11	31	4300	0.25	250
GTC1005P-8N2 ☐	8.2	J / K	8	12	31	4100	0.30	250
GTC1005P-10N ☐	10.0	J / K	8	12	31	3900	0.35	250
GTC1005P-12N ☐	12.0	J / K	8	12	31	3000	0.40	250
GTC1005P-15N ☐	15.0	J / K	8	12	31	2600	0.50	250
GTC1005P-18N ☐	18.0	J / K	8	12	31	2350	0.55	200
GTC1005P-22N ☐	22.0	J / K	8	12	31	2000	0.70	200
GTC1005P-27N ☐	27.0	J / K	8	12	32	1900	0.80	200
GTC1005P-33N ☐	33.0	J / K	8	10	32	1700	1.00	200
GTC1005P-39N ☐	39.0	J / K	8	10	32	1600	1.20	150
GTC1005P-47N ☐	47.0	J / K	8	10	33	1300	1.30	150
GTC1005P-56N ☐	56.0	J / K	8	10	34	1250	2.00	150
GTC1005P-68N ☐	68.0	J / K	8	10	35	1000	2.20	100
GTC1005P-82N ☐	82.0	J / K	8	10	35	900	2.50	100
GTC1005P-R10 ☐	100.0	J / K	8	10	35	850	2.50	100
GTC1005P-R12 ☐	120.0	J / K	8	10	35	750	2.50	100

Product Series Code	**GTC**	Brand	GOTREND
File Version	GTC-V2R5	Editor	Teddy
Established Date	2009.05.22	Description	Multilayer Ceramic High-Frequency Inductor
Latest Edit Date	2013.02.23		

Part No.	L - Value (nH) @100MHz	Tolerance of L.value	Q @100MHz (min)	Q Typcial @		S.R.F (MHz) Ref.	DCR (ohm) max	IDC (mA) max
				100MHz	800MHz			
GTC1608P-1N0S	1.0	+/-0.3nH	8	12	50	>17000	0.10	300
GTC1608P-1N2S	1.2	+/-0.3nH	8	13	65	>17000	0.10	300
GTC1608P-1N5S	1.5	+/-0.3nH	8	13	55	>17000	0.10	300
GTC1608P-1N8S	1.8	+/-0.3nH	8	13	51	13000	0.15	300
GTC1608P-1N7S	1.7	+/-0.3nH	8	13	/	8000	0.10	300
GTC1608P-2N7S	2.7	+/-0.3nH	8	13	45	8600	0.20	300
GTC1608P-3N3 ☐	3.3	S / K	8	13	51	6500	0.25	300
GTC1608P-3N9 ☐	3.9	S / K	8	13	52	6300	0.25	300
GTC1608P-4N7 ☐	4.7	S / K	8	13	41	5400	0.30	300
GTC1608P-5N6 ☐	5.6	S / K	8	13	41	4600	0.30	300
GTC1608P-6N8 ☐	6.8	J / K	8	13	44	4500	0.35	300
GTC1608P-8N2 ☐	8.2	J / K	8	13	44	3800	0.40	300
GTC1608P-10N ☐	10.0	J / K	8	13	45	3700	0.45	300
GTC1608P-12N ☐	12.0	J / K	8	15	46	3200	0.50	300
GTC1608P-15N ☐	15.0	J / K	8	15	48	2900	0.55	300
GTC1608P-18N ☐	18.0	J / K	10	15	48	2100	0.60	300
GTC1608P-22N ☐	22.0	J / K	10	17	45	2100	0.65	300
GTC1608P-27N ☐	27.0	J / K	10	17	43	2000	0.70	300
GTC1608P-33N ☐	33.0	J / K	10	18	39	1600	0.80	300
GTC1608P-39N ☐	39.0	J / K	10	18	37	1500	0.85	300
GTC1608P-47N ☐	47.0	J / K	12	18	35	1200	1.00	300
GTC1608P-56N ☐	56.0	J / K	12	18	32	1100	1.10	300
GTC1608P-62N ☐	620	J / K	12	18	/	1050	0.85	300
GTC1608P-82N ☐	82.0	J / K	12	18	32	850	1.80	300
GTC1608P-R10 ☐	100.0	J / K	12	18	20	750	2.00	300
GTC1608P-R12 ☐	120.0	J / K	8 @50MHz	16	23	700	2.30	300
GTC1608P-R15 ☐	150.0	J / K	8 @50MHz	14	23	650	2.40	300
GTC1608P-R18 ☐	180.0	J / K	8 @50MHz	14	21	550	2.70	300
GTC1608P-R22 ☐	220.0	J / K	8 @50MHz	13	20	450	2.80	300

Product Series Code	**GTC**	Brand	GOTREND
File Version	GTC-V2R5	Editor	Teddy
Established Date	2009.05.22	Description	Multilayer Ceramic High-Frequency Inductor
Latest Edit Date	2013.02.23		

Part No.	L - Value (nH) @100MHz	Tolerance of L.value	Q @100MHz (min)	Q Typcial @		S.R.F (MHz) Ref.	DCR (ohm) max	IDC (mA) max
				100MHz	800MHz			
GTC2012P-1N0S	1.0	+/-0.3nH	10	12	38	>6000	0.10	300
GTC2012P-1N2S	1.2	+/-0.3nH	10	12	38	>6000	0.10	300
GTC2012P-1N5S	1.5	+/-0.3nH	10	13	40	>6000	0.10	300
GTC2012P-1N8S	1.8	+/-0.3nH	10	13	45	>6000	0.10	300
GTC2012P-2N2S	2.2	+/-0.3nH	10	13	48	>6000	0.10	300
GTC2012P-2N7S	2.7	+/-0.3nH	12	13	40	>6000	0.12	300
GTC2012P-3N3	3.3	S / K	12	15	56	>6000	0.13	300
GTC2012P-3N9	3.9	S / K	12	15	54	5600	0.15	300
GTC2012P-4N7	4.7	S / K	12	15	50	5500	0.20	300
GTC2012P-5N6	5.6	S / K	12	15	53	4700	0.23	300
GTC2012P-6N8	6.8	J / K	15	15	51	3900	0.25	300
GTC2012P-8N2	8.2	J / K	15	15	53	3200	0.28	300
GTC2012P-10N	10.0	J / K	15	16	45	3100	0.30	300
GTC2012P-12N	12.0	J / K	15	16	48	2800	0.35	300
GTC2012P-15N	15.0	J / K	15	17	48	2400	0.40	300
GTC2012P-18N	18.0	J / K	15	17	43	2100	0.45	300
GTC2012P-22N	22.0	J / K	15	17	47	2000	0.50	300
GTC2012P-27N	27.0	J / K	15	18	38	1800	0.55	300
GTC2012P-33N	33.0	J / K	15	19	35	1700	0.60	300
GTC2012P-39N	39.0	J / K	18	21	40	1400	0.65	300
GTC2012P-47N	47.0	J / K	18	21	38	1200	0.70	300
GTC2012P-56N	56.0	J / K	18	21	31	1000	0.75	300
GTC2012P-68N	68.0	J / K	18	21	28	900	0.80	300
GTC2012P-82N	82.0	J / K	18	22	25	900	0.85	300
GTC2012P-R10	100.0	J / K	18	23	25	700	0.90	300
GTC2012P-R12	120.0	J / K	13 @50MHz	22	25	600	0.95	300
GTC2012P-R15	150.0	J / K	13 @50MHz	22	24	500	1.00	300
GTC2012P-R18	180.0	J / K	13 @50MHz	23	23	430	1.10	300
GTC2012P-R22	220.0	J / K	12 @50MHz	20	22	400	1.20	300
GTC2012P-R27	270.0	J / K	12 @50MHz	20	22	340	1.30	300
GTC2012P-R33	330.0	J / K	12 @50MHz	22	20	320	1.50	300
GTC2012P-R39	390.0	J / K	10 @50MHz	17	20	270	1.60	300
GTC2012P-R47	470.0	J / K	10 @50MHz	17	20	250	1.80	300
GTC2012P-R56	560.0	J / K	10 @50MHz	17	20	230	2.50	300
GTC2012P-R68	680.0	J / K	10 @50MHz	17	20	180	3.00	300

Product Series Code	**GTCH**	Brand	GOTREND
File Version	GTCH-V1R2	Editor	Teddy
Established Date	2012.10.05	Description	**Multilayer Ceramic High-Frequency Inductor**
Latest Edit Date	2013.02.23		

Features & Application :

* High Frequency SRF up to 10GHz
* Fit for 2.4GHz / 5GHz....etc. RF circuit
* To help you go pass the CE/FCC standard.
* Mobile Device / Handheld Device / LowProfile Device / Panel...

Product Structure

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

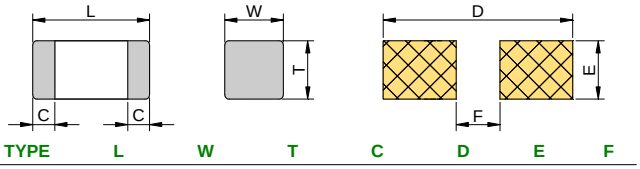
鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example :

GTCH 1005 P F - 1N0 S
1 2 3 4 5 6

1. GTC : GOTREND Series
2. 1005 : Diamension code- Length 1.0mm X Width 0.5mm
3. P : Pb free < 1000ppm
4. F : Material code
5. 1N0 : [L] Value - Inductance 1N0=1.0nH, 10N=10nH, R10=100nH
6. S : Tolerance Code - S = +/- 0.3 nH, J = 5%, K = 10%

DIMENSION : [mm]



TYPE	L	W	T	C	D	E	F
0603 [0201]	0.60+/-0.03	0.30+/-0.03	0.30+/-0.03	0.15+/-0.05	0.80 Ref.	0.30 Ref.	0.30 Ref.
1005 [0402]	1.00+/-0.05	0.50+/-0.05	0.50+/-0.05	0.25+/-0.10	1.50 Ref.	0.50 Ref.	0.50 Ref.
1608 [0603]	1.60+/-0.15	0.80+/-0.15	0.80+/-0.15	0.30+/-0.20	2.60 Ref.	0.80 Ref.	0.60 Ref.

Test Equipment :

* HP4287A , HP4291A+16192A - L , Q , SRF
* HP4338B - RDC

Standard Atmospheric Conditions :
Ambient Temp : 20 +/- 15°C
Relative Humidity : 65 +/- 20%
If there may be any doubt on the result,
measurement shall be made within the following limits :
Ambient Temp : 25 +/- 5°C
Relative Humidity : 75 +/- 10%

MARKING :

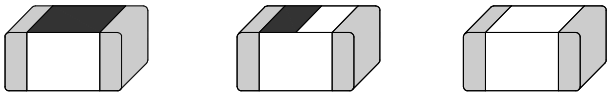
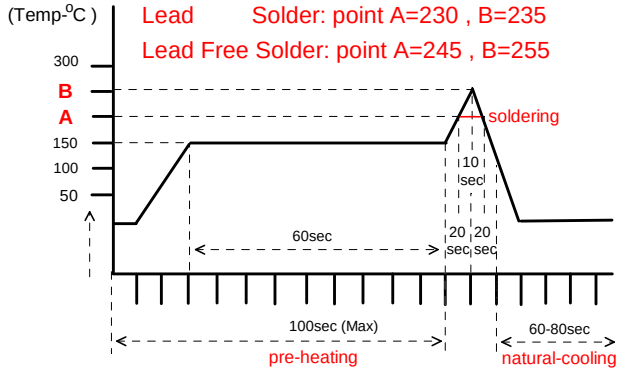


Fig. 1 (1/4 Marking) Fig. 2 (1/8 Marking) Fig. 3 (No Marking)

Operating & Storage Condition :

OPERATING TEMP : -40 ~ +105°C
STORAGE TEMP : -40 ~ +105°C
STORAGE LIFE TIME : 12 MONTH @25°C , RH 65%

Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260° C

Attention & Caution :

Please avoid following matters :
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Product Series Code	**GTCH**	Brand	GOTREND
File Version	GTCH-V1R2	Editor	Teddy
Established Date	2012.10.05	Description	**Multilayer Ceramic High-Frequency Inductor**
Latest Edit Date	2013.02.23		

Electrical Characteristics :

Part No.	Inductance (nH) @100MHz	Inductance Tolerance	Q @100MHz Min.	Rated Current (mA) Max.	DCR (Ohm) Max.	S.R.F (MHz) Min.
GTCH0603PF-1N0 ☐	1.0	S	4.0	470	0.11	10000
GTCH0603PF-1N2 ☐	1.2	S	4.0	450	0.12	10000
GTCH0603PF-1N5 ☐	1.5	S	4.0	430	0.13	10000
GTCH0603PF-1N8 ☐	1.8	S	4.0	390	0.16	10000
GTCH0603PF-2N0 ☐	2.0	S	4.0	380	0.17	10000
GTCH0603PF-2N2 ☐	2.2	S	4.0	360	0.19	8800
GTCH0603PF-2N7 ☐	2.7	S	5.0	340	0.21	7700
GTCH0603PF-3N3 ☐	3.3	S	5.0	320	0.23	6700
GTCH0603PF-3N9 ☐	3.9	S	5.0	300	0.27	6000
GTCH0603PF-4N7 ☐	4.7	S	5.0	280	0.30	5300
GTCH0603PF-5N6 ☐	5.6	S	5.0	260	0.36	4600
GTCH0603PF-6N8 ☐	6.8	J	5.0	250	0.39	3900
GTCH0603PF-8N2 ☐	8.2	J	5.0	230	0.45	3400
GTCH0603PF-10N ☐	10.0	J	5.0	220	0.51	2900
GTCH0603PF-12N ☐	12.0	J	5.0	190	0.68	2700
GTCH0603PF-15N ☐	15.0	J	5.0	180	0.71	2300
GTCH0603PF-18N ☐	18.0	J	5.0	170	0.81	2100
GTCH0603PF-22N ☐	22.0	J	5.0	150	1.00	1800
GTCH0603PF-27N ☐	27.0	J	4.0	120	1.35	1800
GTCH0603PF-33N ☐	33.0	J	4.0	110	1.47	1700
GTCH0603PF-39N ☐	39.0	J	4.0	100	1.72	1500
GTCH0603PF-47N ☐	47.0	J	4.0	100	1.90	1300
GTCH0603PF-56N ☐	56.0	J	4.0	80	2.27	1100
GTCH0603PF-68N ☐	68.0	J	4.0	80	2.66	1100
GTCH0603PF-82N ☐	82.0	J	4.0	70	3.37	1000
GTCH0603PF-R10 ☐	100.0	J	4.0	60	3.74	900

■ **Inductance tolerance : S = ± 0.3 nH ; J = ± 5%**

Product Series Code	**GTCH**	Brand	GOTREND
File Version	GTCH-V1R2	Editor	Teddy
Established Date	2012.10.05	Description	**Multilayer Ceramic High-Frequency Inductor**
Latest Edit Date	2013.02.23		

Electrical Characteristics :

Part No.	Inductance (nH) @100MHz	Inductance Tolerance	Q @100MHz Min.	Rated Current (mA) Max.	DCR (Ohm) Max.	S.R.F (MHz) Min.
GTCH1005PF-1N0 ☐	1.0	S	8.0	300	0.08	10000
GTCH1005PF-1N2 ☐	1.2	S	8.0	300	0.09	10000
GTCH1005PF-1N5 ☐	1.5	S	8.0	300	0.10	6000
GTCH1005PF-1N8 ☐	1.8	S	8.0	300	0.12	6000
GTCH1005PF-2N0 ☐	2.0	S	8.0	300	0.12	6000
GTCH1005PF-2N2 ☐	2.2	S	8.0	300	0.13	6000
GTCH1005PF-2N4 ☐	2.4	S	8.0	300	0.13	6000
GTCH1005PF-2N7 ☐	2.7	S	8.0	300	0.13	6000
GTCH1005PF-3N0 ☐	3.0	S	8.0	300	0.16	6000
GTCH1005PF-3N3 ☐	3.3	S	8.0	300	0.16	6000
GTCH1005PF-3N6 ☐	3.6	S	8.0	300	0.20	5000
GTCH1005PF-3N9 ☐	3.9	S	8.0	300	0.21	4000
GTCH1005PF-4N3 ☐	4.3	S	8.0	300	0.20	4000
GTCH1005PF-4N7 ☐	4.7	S	8.0	300	0.21	4000
GTCH1005PF-5N1 ☐	5.1	S	8.0	300	0.21	4000
GTCH1005PF-5N6 ☐	5.6	S	8.0	300	0.23	4000
GTCH1005PF-6N2 ☐	6.2	S	8.0	300	0.25	3900
GTCH1005PF-6N8 ☐	6.8	J , K	8.0	300	0.25	3900
GTCH1005PF-7N5 ☐	7.5	J , K	8.0	300	0.25	3700
GTCH1005PF-8N2 ☐	8.2	J , K	8.0	300	0.28	3600
GTCH1005PF-9N1 ☐	9.1	J , K	8.0	300	0.30	3400
GTCH1005PF-10N ☐	10.0	J , K	8.0	300	0.31	3200
GTCH1005PF-12N ☐	12.0	J , K	8.0	300	0.40	2700
GTCH1005PF-15N ☐	15.0	J , K	8.0	300	0.46	2300
GTCH1005PF-18N ☐	18.0	J , K	8.0	300	0.55	2100
GTCH1005PF-22N ☐	22.0	J , K	8.0	300	0.60	1900
GTCH1005PF-27N ☐	27.0	J , K	8.0	300	0.70	1600
GTCH1005PF-33N ☐	33.0	J , K	8.0	200	0.80	1300
GTCH1005PF-39N ☐	39.0	J , K	8.0	200	0.90	1200
GTCH1005PF-47N ☐	47.0	J , K	8.0	200	1.00	1000
GTCH1005PF-56N ☐	56.0	J , K	8.0	200	1.00	750
GTCH1005PF-68N ☐	68.0	J , K	8.0	180	1.20	750
GTCH1005PF-82N ☐	82.0	J , K	8.0	150	1.30	600
GTCH1005PF-R10 ☐	100.0	J , K	8.0	150	1.50	600
GTCH1005PF-R12 ☐	120.0	J , K	8.0	150	1.60	600
GTCH1005PF-R15 ☐	150.0	J , K	8.0	140	3.20	550
GTCH1005PF-R18 ☐	180.0	J , K	8.0	130	3.70	500
GTCH1005PF-R22 ☐	220.0	J , K	8.0	120	4.20	450
GTCH1005PF-R27 ☐	270.0	J , K	4.0	110	4.80	400

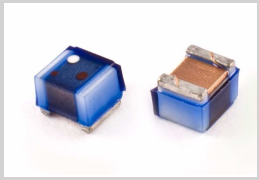
■ **Inductance tolerance : S = ± 0.3 nH ; J = ± 5% ; K = ± 10%**

Product Series Code	**GTCH**	Brand	GOTREND
File Version	GTCH-V1R2	Editor	Teddy
Established Date	2012.10.05	Description	**Multilayer Ceramic High-Frequency Inductor**
Latest Edit Date	2013.02.23		

Electrical Characteristics :

Part No.	Inductance (nH) @100MHz	Inductance Tolerance	Q @100MHz Min.	Rated Current (mA) Max.	DCR (Ohm) Max.	S.R.F (MHz) Min.
GTCH1608PF-1N0 ☐	1.0	S	8.0	300	0.05	10000
GTCH1608PF-1N2 ☐	1.2	S	8.0	300	0.05	10000
GTCH1608PF-1N5 ☐	1.5	S	8.0	300	0.10	6000
GTCH1608PF-1N8 ☐	1.8	S	8.0	300	0.10	6000
GTCH1608PF-2N2 ☐	2.2	S	8.0	300	0.10	6000
GTCH1608PF-2N7 ☐	2.7	S	10.0	300	0.10	6000
GTCH1608PF-3N3 ☐	3.3	J , K	10.0	300	0.12	6000
GTCH1608PF-3N9 ☐	3.9	J , K	10.0	300	0.14	6000
GTCH1608PF-4N7 ☐	4.7	J , K	10.0	300	0.16	4000
GTCH1608PF-5N6 ☐	5.6	J , K	10.0	300	0.18	4000
GTCH1608PF-6N8 ☐	6.8	J , K	10.0	300	0.22	4000
GTCH1608PF-8N2 ☐	8.2	J , K	10.0	300	0.24	3500
GTCH1608PF-10N ☐	10.0	J , K	12.0	300	0.26	3400
GTCH1608PF-12N ☐	12.0	J , K	12.0	300	0.28	2600
GTCH1608PF-15N ☐	15.0	J , K	12.0	300	0.32	2300
GTCH1608PF-18N ☐	18.0	J , K	12.0	300	0.35	2000
GTCH1608PF-22N ☐	22.0	J , K	12.0	300	0.40	1600
GTCH1608PF-27N ☐	27.0	J , K	12.0	300	0.45	1400
GTCH1608PF-33N ☐	33.0	J , K	12.0	300	0.55	1200
GTCH1608PF-39N ☐	39.0	J , K	12.0	300	0.60	1100
GTCH1608PF-47N ☐	47.0	J , K	12.0	300	0.70	900
GTCH1608PF-56N ☐	56.0	J , K	12.0	300	0.75	900
GTCH1608PF-68N ☐	68.0	J , K	12.0	300	0.85	700
GTCH1608PF-82N ☐	82.0	J , K	12.0	300	0.95	600
GTCH1608PF-R10 ☐	100.0	J , K	12.0	300	1.00	600
GTCH1608PF-R12 ☐	120.0	J , K	8.0	300	1.20	500
GTCH1608PF-R15 ☐	150.0	J , K	8.0	300	1.20	500
GTCH1608PF-R18 ☐	180.0	J , K	8.0	300	1.30	400

■ **Inductance tolerance : S = ± 0.3 nH ; J = ± 5% ; K = ± 10%**



Product Series Code	**GTH**	Brand	GOTREND
File Version	GTH-V4R8	Editor	Teddy
Established Date	2009.07.30	Description	**High Frequency Wound Inductor**
Latest Edit Date	2013.02.23		

Features & Application :

* Ceramic construction for high Q ,high frequency characteristic
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* Mobiel Device / Handheld Device / LowProfile Device / Panel...

Product Structure :

SMD DIP Shield Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

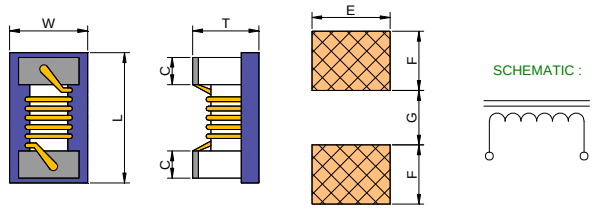
Part No Example :

GTH	2520	P	☐	-	6R8	☐
1	2	3	4		5	6

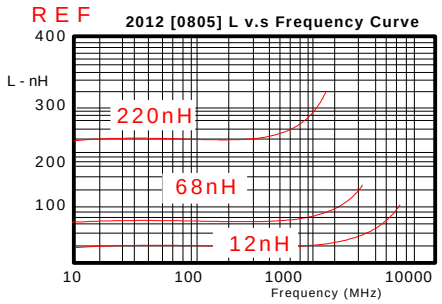
1.GOTREND Series : GTH
2. Dimension Code : 2520 [2.5 x 2.0 mm]
3. P = Pb < 1000 ppm
4. [C] [D] [E] Color Dot Marking
[A] 1005 Size High Current Type
5. [L] Value : Inductance 6R8 = 6.8uH
6. Tolerance : J = 5% , K = 10%,

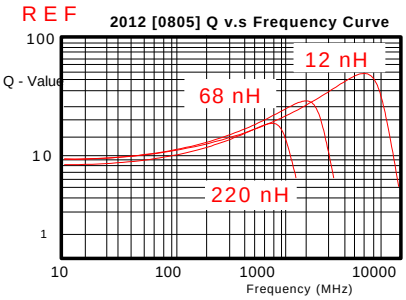
DIMENSION : [mm]

Recommend Pad Layout [mm]



TYPE	L [Max.]	W [Max.]	T [Max.]	C [Ref.]	E [Ref.]	F [Ref.]	G [Ref.]
GTH1005P [0402]	1.27	0.76	0.61	0.23	0.66	0.50	0.46
GTH1608P [0603]	1.80	1.12	1.02	0.38	1.02	0.64	0.64
GTH2012P [0805]	2.29	1.73	1.52	0.51	1.55	1.02	0.64
GTH2520P [1008]	2.92	2.80	2.23	0.51	2.54	1.02	1.27



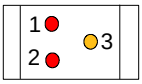


Test Equipment :

* HP4284A , HP42841A - L , IDC , Q , RDC
* HP8753D NETWORK ANALYZER - SRF

Standard Atmospheric Conditions :
Ambient Temp : 20 +/- 15°C
Relative Humidity : 65 +/- 20%
If there may be any doubt on the result,
measurement shall be made within the following limits :
Ambient Temp : 25 +/- 5°C
Relative Humidity : 75 +/- 10%

Marking Expression : 2520 / (2012 & 1608 : 3rd Dot only)



0 1 2 3 4 5 6 7 8 9
黑 棕 紅 橙 黃 綠 藍 紫 灰 白

料號色碼依下列算法計之.....
For inductance meanning:
[(1st. dot x10)+2nd. dot] x $10^{3rd.\ dot}$ = nH
For example:
GTH-2520S-220J Color Dot = 紅 1st. 紅 2nd. 橙 3rd.
Inductance = [(<紅 2> x 10) +<紅 2>] x $10^{<橙\ 3>}$
= 22 x 1000 = 22000 nH
22000nH ÷ 1000 = 22uH

Operating & Storage Condition :

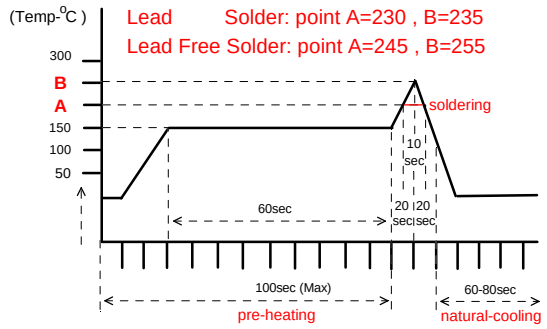
OPERATING TEMP : -40 ~ +85°C

STORAGE TEMP : -40 ~ +85°C
STORAGE LIFE TIME : 6 MONTH @25°C , RH 65%

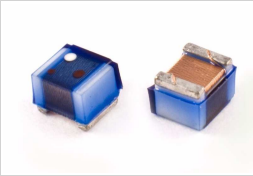
Attention & Caution :

Please avoid following matters :
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Recommand Reflow Curve (TIME:Second)



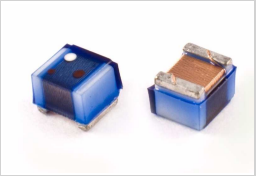
Notice: Iron Soldering: 3 Seconds Max. @260°C



Product Series Code	**GTH**	Brand	GOTREND
File Version	GTH-V4R8	Editor	Teddy
Established Date	2009.07.30	Description	**High Frequency Wound Inductor**
Latest Edit Date	2013.02.23		

Part No.	Inductance (nH)	L-Test Freq. (MHz)	S.R.F (MHz) min.	DCR (Ohm) max.	IDC (mA) max.
GTH1005PA-20N□	20.0	7.9	2600	0.050	1600
GTH1005PA-22N□	22.0	7.9	2500	0.065	1300
GTH1005PA-33N□	33.0	7.9	2300	0.060	1400
GTH1005PA-36N□	36.0	7.9	2300	0.075	1300
GTH1005PA-39N□	39.0	7.9	2200	0.115	830
GTH1005PA-51N□	51.0	7.9	1930	0.070	1100
GTH1005PA-56N□	56.0	7.9	1900	0.095	1000
GTH1005PA-72N□	72.0	7.9	1650	0.100	1000
GTH1005PA-78N□	78.0	7.9	1600	0.130	970
GTH1005PA-R10□	100.0	7.9	1400	0.160	900
GTH1005PA-R14□	140.0	7.9	1220	0.260	630
GTH1005PA-R18□	180.0	7.9	1150	0.280	560
GTH1005PA-R20□	200.0	7.9	1000	0.440	400
GTH1005PA-R22□	220.0	7.9	1150	0.530	380
GTH1005PA-R25□	250.0	7.9	900	0.360	520
GTH1005PA-R27□	270.0	7.9	860	0.550	360
GTH1005PA-R30□	300.0	7.9	860	0.410	420
GTH1005PA-R33□	330.0	7.9	820	0.560	350
GTH1005PA-R36□	360.0	7.9	810	0.575	360
GTH1005PA-R39□	390.0	7.9	760	0.750	300
GTH1005PA-R42□	420.0	7.9	700	0.700	340
GTH1005PA-R47□	470.0	7.9	650	0.730	310
GTH1005PA-R56□	560.0	7.9	600	0.920	200

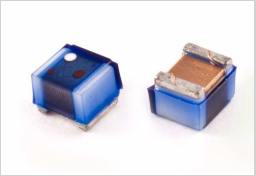
* Tolerance : J (5%) , K (10%)



Product Series Code	**GTH**	Brand	GOTREND
File Version	GTH-V4R8	Editor	Teddy
Established Date	2009.07.30	Description	**High Frequency Wound Inductor**
Latest Edit Date	2013.02.23		

Part No.	Inductance (nH)	L-Test Freq. (MHz)	Q @250MHz min.	S.R.F (MHz) min.	DCR (Ohm) max.	IDC (mA) max.	900MHz		1.7GHz	
							L typ.	Q typ.	L typ.	Q typ.
GTH1005P□-1N0□	1.0	250	16	12700	0.045	1360	1.02	77	1.02	69
GTH1005P□-1N2□	1.2	250	/	12900	0.090	740	x	x	x	x
GTH1005P□-1N5□	1.5	250	14	10000	0.100	300	x	x	x	x
GTH1005P□-1N9□	1.9	250	16	11300	0.070	1040	1.72	68	1.74	82
GTH1005P□-2N0□	2.0	250	16	11100	0.070	1040	1.93	54	1.93	75
GTH1005P□-2N2□	2.2	250	19	10800	0.070	960	2.19	59	2.23	100
GTH1005P□-2N4□	2.4	250	15	10500	0.070	790	2.24	51	2.27	68
GTH1005P□-2N7□	2.7	250	16	10400	0.120	640	2.23	42	2.25	61
GTH1005P□-3N3□	3.3	250	19	7000	0.066	840	3.10	65	3.12	87
GTH1005P□-3N6□	3.6	250	19	6800	0.066	840	3.56	45	3.62	71
GTH1005P□-3N9□	3.9	250	19	5800	0.066	840	3.89	50	4.00	75
GTH1005P□-4N3□	4.3	250	18	6000	0.091	700	4.19	47	4.30	71
GTH1005P□-4N7□	4.7	250	15	4700	0.130	640	4.55	48	4.68	68
GTH1005P□-5N1□	5.1	250	20	4800	0.083	800	5.15	56	5.25	82
GTH1005P□-5N6□	5.6	250	20	4800	0.083	760	5.16	54	5.28	81
GTH1005P□-6N2□	6.2	250	20	4800	0.083	760	6.16	52	6.37	76
GTH1005P□-6N8□	6.8	250	20	4800	0.083	680	6.56	63	6.93	78
GTH1005P□-7N5□	7.5	250	22	4800	0.104	680	7.91	60	8.22	88
GTH1005P□-8N2□	8.2	250	22	4400	0.104	680	8.50	57	8.85	84
GTH1005P□-8N7□	8.7	250	18	4100	0.200	480	8.78	54	9.21	73
GTH1005P□-9N0□	9.0	250	22	4160	0.104	680	9.07	62	9.53	78
GTH1005P□-9N5□	9.5	250	18	4000	0.200	480	9.42	54	9.98	69
GTH1005P□-10N□	10.0	250	21	3900	0.195	480	9.80	50	10.10	67
GTH1005P□-11N□	11.0	250	24	3680	0.120	640	10.70	52	11.20	78
GTH1005P□-12N□	12.0	250	24	3600	0.120	640	11.90	53	12.70	71
GTH1005P□-13N□	13.0	250	24	3450	0.210	440	13.40	51	14.60	57
GTH1005P□-15N□	15.0	250	24	3280	0.172	560	14.60	55	15.50	77
GTH1005P□-16N□	16.0	250	24	3100	0.220	560	16.60	46	18.80	47
GTH1005P□-18N□	18.0	250	24	3100	0.230	420	18.30	57	20.30	62
GTH1005P□-19N□	19.0	250	24	3040	0.202	480	19.10	50	21.10	67
GTH1005P□-20N□	20.0	250	25	3000	0.250	420	20.70	52	23.70	53
GTH1005P□-22N□	22.0	250	25	2800	0.300	400	23.20	53	26.80	53
GTH1005P□-23N□	23.0	250	22	2720	0.300	400	23.80	49	26.90	64
GTH1005P□-24N□	24.0	250	25	2700	0.300	400	25.10	51	29.50	50
GTH1005P□-27N□	27.0	250	24	2480	0.300	400	28.70	49	33.50	63
GTH1005P□-30N□	30.0	250	25	2350	0.350	400	31.10	46	38.50	39
GTH1005P□-33N□	33.0	250	24	2350	0.350	400	34.90	31	41.74	32
GTH1005P□-36N□	36.0	250	24	2320	0.440	320	39.50	44	48.40	53
GTH1005P□-39N□	39.0	250	25	2100	0.550	200	41.70	47	50.23	45
GTH1005P□-40N□	40.0	250	24	2240	0.440	320	39.00	44	47.40	33
GTH1005P□-43N□	43.0	250	25	2030	0.810	100	45.80	46	61.55	34
GTH1005P□-47N□	47.0	250	20	2100	0.830	150	50.00	38	55.80	37
GTH1005P□-51N□	51.0	250	25	1750	0.820	100	50.40	47	59.40	37
GTH1005P□-56N□	56.0	250	22	1760	0.970	100	57.40	49	72.40	40
GTH1005P□-68N□	68.0	250	22	1620	1.120	100	69.60	45	83.40	38
GTH1005P□-82N□	82.0	250	/	1260	1.550	50	x	x	x	x
GTH1005P□-R10□	100.0	250	/	1160	2.000	30	x	x	x	x
GTH1005P□-R12□	120.0	250	20	>1800	2.660	50	x	x	x	x

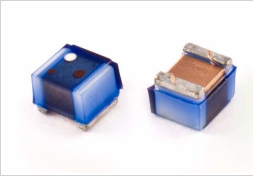
* Tolerance : G (2%) , J (5%) , K (10%)



Product Series Code	**GTH**	Brand	GOTREND
File Version	GTH-V4R8	Editor	Teddy
Established Date	2009.07.30	Description	**High Frequency Wound Inductor**
Latest Edit Date	2013.02.23		

Part No.	Inductance (nH)	L-Test Freq. (MHz)	Q @250MHz min.	S.R.F (MHz) min.	DCR (Ohm) max.	IDC (mA) max.	900MHz		1.7GHz		E TYPE COLOR COATING
							L typ.	Q typ.	L typ.	Q typ.	
GTH1608P□-1N6K	1.60 ± 10%	250	16	12500	0.040	700	1.53	35	1.58	55	Red
GTH1608P□-1N8K	1.80 ± 10%	250	16	12500	0.045	700	1.63	35	1.66	50	Black
GTH1608P□-2N2K	2.20 ± 10%	250	15	6000	0.100	700	2.18	41	2.20	64	Yellow
GTH1608P□-2N3K	2.30 ± 10%	250	16	4000	0.140	700	2.32	32	2.35	40	None
GTH1608P□-3N3K	3.30 ± 10%	250	22	6600	0.008	700	3.35	47	3.40	65	Blue
GTH1608P□-3N6K	3.60 ± 10%	250	22	5800	0.063	700	3.53	49	3.58	65	Red
GTH1608P□-3N9K	3.90 ± 10%	250	22	6000	0.080	700	3.95	49	3.96	67	Brown
GTH1608P□-4N3K	4.30 ± 10%	250	22	5800	0.063	700	4.32	49	4.43	67	Orange
GTH1608P□-4N7K	4.70 ± 10%	250	20	5800	0.120	700	4.65	53	4.80	67	Violet
GTH1608P□-5N1K	5.10 ± 10%	250	20	5700	0.120	700	5.13	47	5.36	56	Green
GTH1608P□-5N6K	5.60 ± 10%	250	20	5800	0.170	700	5.53	56	5.86	77	Black
GTH1608P□-6N3K	6.30 ± 10%	250	20	5700	0.120	700	5.50	47	6.10	60	White
GTH1608P□-6N8J	6.80 ± 5%	250	27	5800	0.130	700	6.75	60	7.10	81	Red
GTH1608P□-7N5J	7.50 ± 5%	250	27	4800	0.120	700	7.39	62	7.71	81	Brown
GTH1608P□-8N2J	8.20 ± 5%	250	27	4700	0.130	700	8.25	64	8.40	87	Orange
GTH1608P□-8N7J	8.70 ± 5%	250	27	4600	0.110	700	8.84	62	9.38	58	Yellow
GTH1608P□-9N1J	9.10 ± 5%	250	28	4600	0.120	700	9.21	62	9.77	75	Black
GTH1608P□-9N5J	9.50 ± 5%	250	27	5400	0.150	700	9.64	59	9.38	61	Blue
GTH1608P□-10NJ	10.00 ± 5%	250	31	4800	0.150	700	10.00	66	10.50	83	Orange
GTH1608P□-11NJ	11.00 ± 5%	250	30	4000	0.150	700	11.30	53	12.10	56	Gray
GTH1608P□-12NJ	12.00 ± 5%	250	35	4000	0.150	700	12.30	72	13.50	83	Yellow
GTH1608P□-15NJ	15.00 ± 5%	250	35	4000	0.180	700	15.40	64	16.80	89	Green
GTH1608P□-16NJ	16.00 ± 5%	250	34	3300	0.170	700	16.50	55	18.00	52	White
GTH1608P□-18NJ	18.00 ± 5%	250	35	3100	0.180	700	18.70	70	21.40	69	Blue
GTH1608P□-19NJ	19.00 ± 5%	250	35	3000	0.190	700	19.71	73	23.35	62	Brown
GTH1608P□-20NJ	20.00 ± 5%	250	38	3000	0.180	700	20.50	79	23.27	86	Red
GTH1608P□-22NJ	22.00 ± 5%	250	38	3000	0.210	700	22.80	73	26.10	71	Violet
GTH1608P□-23NJ	23.00 ± 5%	250	38	2850	0.205	700	24.19	70	28.48	72	Orange
GTH1608P□-24NJ	24.00 ± 5%	250	36	2650	0.210	700	24.10	45	28.00	40	Black
GTH1608P□-25NJ	25.00 ± 5%	250	38	2800	0.210	600	25.93	84	29.73	89	Yellow
GTH1608P□-27NJ	27.00 ± 5%	250	40	2800	0.220	600	29.20	74	34.60	65	Gray
GTH1608P□-30NJ	30.00 ± 5%	250	37	2250	0.220	600	31.40	47	39.80	28	Brown
GTH1608P□-33NJ	33.00 ± 5%	250	40	2300	0.240	600	36.00	67	49.50	42	White
GTH1608P□-36NJ	36.00 ± 5%	250	37	2080	0.250	600	39.10	47	48.90	24	Red
GTH1608P□-39NJ	39.00 ± 5%	250	40	2200	0.260	600	42.70	60	60.20	40	Black
GTH1608P□-43NJ	43.00 ± 5%	200	38	2000	0.280	600	46.90	44	60.30	21	Orange
GTH1608P□-47NJ	47.00 ± 5%	200	38	2000	0.280	600	52.20	62	77.20	35	Brown
GTH1608P□-51NJ	51.00 ± 5%	200	38	2130	0.300	600	59.27	50	103.8	23	Violet
GTH1608P□-56NJ	56.00 ± 5%	200	38	1900	0.310	600	62.50	56	97.00	26	Red
GTH1608P□-62NJ	62.00 ± 5%	200	37	1800	0.330	600	73.30	42	156.5	16	Gray
GTH1608P□-68NJ	68.00 ± 5%	200	37	1700	0.340	600	80.50	54	168.0	21	Orange
GTH1608P□-72NJ	72.00 ± 5%	150	34	1700	0.490	400	82.00	53	135.0	20	Yellow
GTH1608P□-82NJ	82.00 ± 5%	150	34	1700	0.540	400	96.20	54	177.0	21	Green
GTH1608P□-91NJ	91.00 ± 5%	150	34	1500	0.560	400	111.80	49	X	X	Brown
GTH1608P□-R10J	100.00 ± 5%	150	34	1400	0.580	400	124.00	49	X	X	Blue
GTH1608P□-R11J	110.00 ± 5%	150	32	1350	0.610	300	138.00	43	X	X	Violet
GTH1608P□-R12J	120.00 ± 5%	150	32	1300	0.650	300	166.00	39	X	X	Gray
GTH1608P□-R13J	130.00 ± 5%	150	32	1200	0.750	280	180.10	36	X	X	Orange
GTH1608P□-R15J	150.00 ± 5%	150	32	1300	0.950	280	230.00	25	X	X	White
GTH1608P□-R17J	170.00 ± 5%	100	25	990	1.150	240	228.40	34	X	X	Yellow
GTH1608P□-R18J	180.00 ± 5%	100	25	1250	1.400	250	305.00	22	X	X	Black
GTH1608P□-R19J	190.00 ± 5%	100	25	990	1.350	200	279.10	30	X	X	Green
GTH1608P□-R20J	200.00 ± 5%	100	25	990	1.500	200	X	X	X	X	Orange
GTH1608P□-R22J	220.00 ± 5%	100	25	900	1.600	250	480.00	8	X	X	Brown
GTH1608P□-R24J	240.00 ± 5%	100	25	900	1.900	200	X	X	X	X	Violet
GTH1608P□-R27J	270.00 ± 5%	100	25	900	2.100	200	980.00	4	X	X	Red
GTH1608P□-R33J	330.00 ± 5%	100	25	900	2.750	100	970.6	9	X	X	Blue
GTH1608P□-R34J	340.00 ± 5%	100	25	900	2.900	100	X	X	X	X	Gray
GTH1608P□-R39J	390.00 ± 5%	100	25	900	4.350	100	734.5	29	X	X	Yellow
GTH1608P□-R47J	470.00 ± 5%	100	25	750	4.000	80	X	X	X	X	Green
GTH1608P□-1R0J	1000.00 ± 5%	7.96	16@7.96M	190	1.200	300	x	x	X	X	None

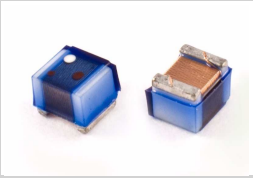
* Tolerance : G (2%) , J (5%) , K (10%)



Product Series Code	**GTH**	Brand	GOTREND
File Version	GTH-V4R8	Editor	Teddy
Established Date	2009.07.30	Description	**High Frequency Wound Inductor**
Latest Edit Date	2013.02.23		

Part NO.	Inductance (nH)	L-Test Freq. (MHz)	Q min.	Q-Test Freq. (MHz)	S.R.F (MHz) min.	DCR (Ohm) max.	IDC (mA) max.	E TYPE COLOR COATING
GTH2012P□-2N8J	2.8 ± 5%	250	55	1500	7900	0.06	800	Gray
GTH2012P□-3N0J	3.0 ± 5%	250	55	1500	7900	0.08	800	White
GTH2012P□-3N3J	3.3 ± 5%	250	45	1500	7900	0.12	600	Black
GTH2012P□-5N1J	5.1 ± 5%	250	60	1000	5800	0.06	600	Yellow
GTH2012P□-5N6J	5.6 ± 5%	250	65	1000	5500	0.08	600	Orange
GTH2012P□-6N2J	6.2 ± 5%	250	50	1000	5500	0.11	600	Violet
GTH2012P□-6N8J	6.8 ± 5%	250	50	1000	5500	0.11	600	Brown
GTH2012P□-7N5J	7.5 ± 5%	250	50	1000	4500	0.14	600	Green
GTH2012P□-8N2J	8.2 ± 5%	250	50	1000	4700	0.12	600	Red
GTH2012P□-10NJ	10.0 ± 5%	250	60	1000	4200	0.10	600	Blue
GTH2012P□-12NJ	12.0 ± 5%	250	50	500	4000	0.15	600	Orange
GTH2012P□-15NJ	15.0 ± 5%	250	50	500	3400	0.17	600	Yellow
GTH2012P□-18NJ	18.0 ± 5%	250	50	500	3300	0.20	600	Green
GTH2012P□-22NJ	22.0 ± 5%	250	55	500	2600	0.22	500	Blue
GTH2012P□-24NJ	24.0 ± 5%	250	50	500	2000	0.22	500	Gray
GTH2012P□-27NJ	27.0 ± 5%	250	55	500	2500	0.25	500	Violet
GTH2012P□-33NJ	33.0 ± 5%	250	60	500	2050	0.27	500	Gray
GTH2012P□-36NJ	36.0 ± 5%	250	55	500	1700	0.27	500	Orange
GTH2012P□-39NJ	39.0 ± 5%	250	60	500	2000	0.29	500	White
GTH2012P□-43NJ	43.0 ± 5%	200	60	500	1650	0.34	500	Yellow
GTH2012P□-47NJ	47.0 ± 5%	200	60	500	1650	0.31	500	Black
GTH2012P□-56NJ	56.0 ± 5%	200	60	500	1550	0.34	500	Brown
GTH2012P□-68NJ	68.0 ± 5%	200	60	500	1450	0.38	500	Red
GTH2012P□-75NJ	75.0 ± 5%	200	60	500	1400	0.40	400	Violet
GTH2012P□-82NJ	82.0 ± 5%	150	65	500	1300	0.42	400	Orange
GTH2012P□-91NJ	91.0 ± 5%	150	65	500	1200	0.48	400	Black
GTH2012P□-R10J	100.0 ± 5%	150	65	500	1200	0.46	400	Yellow
GTH2012P□-R11J	110.0 ± 5%	150	50	250	1000	0.48	400	Brown
GTH2012P□-R12J	120.0 ± 5%	150	50	250	1100	0.51	400	Green
GTH2012P□-R15J	150.0 ± 5%	100	50	250	920	0.56	400	Blue
GTH2012P□-R16J	160.0 ± 5%	100	50	250	900	0.60	400	Gray
GTH2012P□-R18J	180.0 ± 5%	100	50	250	870	0.64	400	Violet
GTH2012P□-R20J	200.0 ± 5%	100	50	250	860	0.66	400	Red
GTH2012P□-R22J	220.0 ± 5%	100	50	250	850	0.78	400	Gray
GTH2012P□-R24J	240.0 ± 5%	100	44	250	690	1.00	350	Red
GTH2012P□-R25J	250.0 ± 5%	100	45	250	680	1.00	350	Yellow
GTH2012P□-R27J	270.0 ± 5%	100	48	250	650	1.00	350	White
GTH2012P□-R33J	330.0 ± 5%	100	48	250	600	1.40	310	Black
GTH2012P□-R39J	390.0 ± 5%	100	48	250	560	1.50	290	Brown
GTH2012P□-R47J	470.0 ± 5%	50	33	100	375	1.70	220	Violet
GTH2012P□-R56J	560.0 ± 5%	25	23	50	340	1.90	210	Orange
GTH2012P□-R62J	620.0 ± 5%	25	23	50	220	2.20	210	White
GTH2012P□-R68J	680.0 ± 5%	25	23	50	200	2.20	190	Green
GTH2012P□-R75J	750.0 ± 5%	25	23	50	200	2.30	180	Violet
GTH2012P□-R82J	820.0 ± 5%	25	23	50	200	2.35	180	Blue
GTH2012P□-1R0J	1000.0 ± 5%	25	20	50	100	2.50	170	Violet
GTH2012P□-1R2J	1200.0 ± 5%	7.9	18	25	100	2.50	170	None
GTH2012P□-1R5J	1500.0 ± 5%	7.9	16	25	100	2.50	170	Black
GTH2012P□-1R8J	1800.0 ± 5%	7.9	16	7.9	80	2.50	170	Brown
GTH2012P□-2R2J	2200.0 ± 5%	7.9	16	7.9	60	2.70	160	Red
GTH2012P□-2R7J	2700.0 ± 5%	7.9	16	7.9	50	2.95	150	Orange

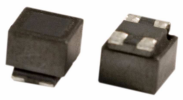
* Tolerance : G (2%) , J (5%) , K (10%)



Product Series Code	**GTH**	Brand	GOTREND
File Version	GTH-V4R8	Editor	Teddy
Established Date	2009.07.30	Description	**High Frequency Wound Inductor**
Latest Edit Date	2013.02.23		

Part NO.	Inductance (nH)	L-Test Freq. (MHz)	Q min.	Q-Test Freq. (MHz)	S.R.F (MHz) min.	DCR (Ohm) max.	IDC (mA) max.	E TYPE COLOR COATING		
								1st.	2nd.	3rd.
GTH2520P□-10NK	10 ± 10%	50	50	500	4100	0.08	1000	Brown	Black	Black
GTH2520P□-12NK	12 ± 10%	50	50	500	3300	0.09	1000	Brown	Red	Black
GTH2520P□-15NK	15 ± 10%	50	45	500	2500	0.10	1000	Brown	Green	Black
GTH2520P□-18NK	18 ± 10%	50	50	350	2400	0.11	1000	Brown	Gray	Black
GTH2520P□-22NJ	22 ± 5%	50	55	350	2400	0.12	1000	Red	Red	Black
GTH2520P□-27NJ	27 ± 5%	50	55	350	1600	0.13	1000	Red	Violet	Black
GTH2520P□-33NJ	33 ± 5%	50	60	350	1600	0.14	1000	Orange	Orange	Black
GTH2520P□-39NJ	39 ± 5%	50	60	350	1500	0.15	1000	Orange	White	Black
GTH2520P□-47NJ	47 ± 5%	50	65	350	1500	0.16	1000	Yellow	Violet	Black
GTH2520P□-56NJ	56 ± 5%	50	65	350	1300	0.18	1000	Green	Blue	Black
GTH2520P□-68NJ	68 ± 5%	50	65	350	1300	0.20	1000	Blue	Gray	Black
GTH2520P□-82NJ	82 ± 5%	50	60	350	1000	0.22	1000	Gray	Red	Black
GTH2520P□-R10J	100 ± 5%	25	60	350	1000	0.56	650	Brown	Black	Brown
GTH2520P□-R12J	120 ± 5%	25	60	350	950	0.63	650	Brown	Red	Brown
GTH2520P□-R15J	150 ± 5%	25	45	100	850	0.70	580	Brown	Green	Brown
GTH2520P□-R18J	180 ± 5%	25	45	100	750	0.77	620	Brown	Gray	Brown
GTH2520P□-R22J	220 ± 5%	25	45	100	700	0.84	500	Red	Red	Brown
GTH2520P□-R27J	270 ± 5%	25	45	100	600	0.91	500	Red	Violet	Brown
GTH2520P□-R33J	330 ± 5%	25	45	100	570	1.05	450	Orange	Orange	Brown
GTH2520P□-R39J	390 ± 5%	25	45	100	500	1.12	470	Orange	White	Brown
GTH2520P□-R47J	470 ± 5%	25	45	100	450	1.19	470	Yellow	Violet	Brown
GTH2520P□-R56J	560 ± 5%	25	45	100	415	1.33	400	Green	Blue	Brown
GTH2520P□-R62J	620 ± 5%	25	45	100	375	1.40	300	Blue	Red	Brown
GTH2520P□-R68J	680 ± 5%	25	45	100	375	1.47	400	Blue	Gray	Brown
GTH2520P□-R75J	750 ± 5%	25	45	100	360	1.54	360	Violet	Green	Brown
GTH2520P□-R82J	820 ± 5%	25	45	100	350	1.65	400	Gray	Red	Brown
GTH2520P□-R91J	910 ± 5%	25	35	50	320	1.68	380	White	Brown	Brown
GTH2520P□-1R0J	1000 ± 5%	25	35	50	290	1.75	370	Brown	Black	Red
GTH2520P□-1R2J	1200 ± 5%	7.9	35	50	250	2.00	310	Brown	Red	Red
GTH2520P□-1R5J	1500 ± 5%	7.9	28	50	200	2.30	330	Brown	Green	Red
GTH2520P□-1R8J	1800 ± 5%	7.9	28	5	160	2.60	300	Brown	Gray	Red
GTH2520P□-2R2J	2200 ± 5%	7.9	28	50	160	2.80	280	Red	Red	Red
GTH2520P□-2R7J	2700 ± 5%	7.9	22	25	135	3.20	290	Red	Violet	Red
GTH2520P□-3R3J	3300 ± 5%	7.9	22	25	110	3.40	290	Orange	Orange	Red
GTH2520P□-3R9J	3900 ± 5%	7.9	20	25	100	3.60	260	Orange	White	Red
GTH2520P□-4R7J	4700 ± 5%	7.9	20	25	90	4.00	260	Yellow	Violet	Red
GTH2520P□-5R6J	5600 ± 5%	7.9	18	7.9	40	4.20	240	Green	Blue	Red
GTH2520P□-6R8J	6800 ± 5%	7.9	18	7.9	40	4.90	200	Blue	Gray	Red
GTH2520P□-8R2J	8200 ± 5%	7.9	18	7.9	25	6.00	170	Gray	Red	Red
GTH2520P□-100J	10000 ± 5%	7.9	18	7.9	25	8.00	150	Brown	Black	Orange
GTH2520P□-4N7J	4.7 ± 5%	/	/	50	4000	1.00	150	/	/	/
GTH2520P□-100J	5.6 ± 5%	/	/	50	4000	1.00	150	/	/	/

* Tolerance : G (2%) , J (5%) , K (10%)



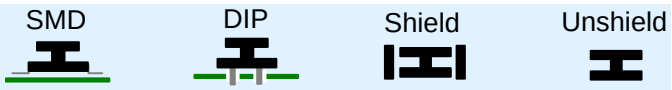
Product Series Code	**GDLW**	Brand	GOTREND
File Version	GDLW-V1R4	Editor	Teddy
Established Date	2009.07.08	Description	**Chip Common Mode Choke Coil**
Latest Edit Date	2013.02.23		

Features & Application:

* Chip Common Mode Choke Coil
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* Mobile Device / Handheld Device / LowProfile Device / Panel...

Product Structure

SMD | DIP | Shield | Unshield



2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

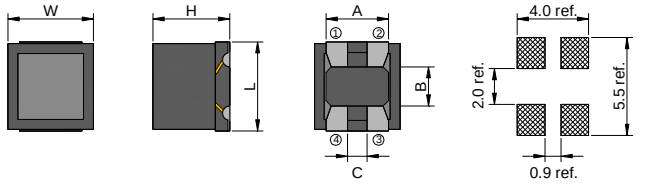
Part No Example:

GDLW	0504	P -	200	N
1	2	3	4	5

1. GDLW : GOTREND Series
2. 0504 : L 5.0mm X W 5.0mm X H 4.0mm
3. P : Pb free<1000ppm
4. 200 : Impedance [ohm] @10MHz = 20 ohm
5. N : Tolerance N = min.

DIMENSION : [mm]

Recommend Pad Layout [mm]



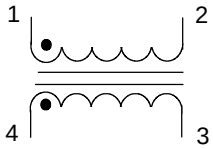
SIZE	W	L	H	A	B	C
0502	4.8 +/-0.3	5.0 +/-0.3	2.5 max.	3.5 typ.	2.2 typ.	1.1 typ.
0504	4.8 +/-0.3	5.0 +/-0.3	4.8 max.	3.5 typ.	2.2 typ.	1.1 typ.

Test Equipment :

* HP4284A , HP42841A - IDC , RDC
* HP4287A - Impedance
* HP8753E - HP8753D Network Analyzer - Insulation Resistance

Standard Atmospheric Conditions:
Ambient Temp:20+/-15°C
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:75+/-10%

SCHEMATIC:



Operating & Storage Condition:

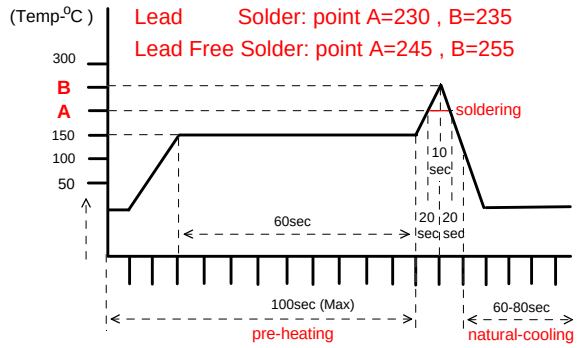
OPERATING TEMP:-40~+125°C

STORAGE TEMP:-40~+125°C
STORAGE LIFE TIME: 12 MONTH @25°C , RH 65%

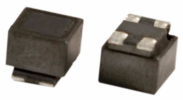
Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Recommend Reflow Curve (TIME:Second)



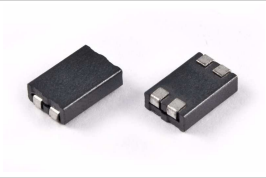
Notice: Iron Soldering: 3 Seconds Max. @260 °C



Product Series Code	**GDLW**	Brand	GOTREND
File Version	GDLW-V1R4	Editor	Teddy
Established Date	2009.07.08	Description	**Chip Common Mode Choke Coil**
Latest Edit Date	2013.02.23		

Rating

Part No.	Impedance (Ohm) @10MHz	Impedance (Ohm) @100MHz	Rated Voltage V [DC]	Withstanding Voltage V [DC]	Rated Current [A]	DCR [Ohm]	Insulation Resistance (M Ohm)
GDLW0502P - 200N	20 min.	250 typ.	50	125	5.0	0.014 +/-40%	10.0 min.
GDLW0502P - 300N	30 min.	500 typ.	50	125	4.0	0.019 +/-40%	10.0 min.
GDLW0502P - 600N	60 min.	1000 typ.	50	125	2.0	0.024 +/-40%	10.0 min.
GDLW0502P - 101N	100 min.	1400 typ.	50	125	1.5	0.040 +/-40%	10.0 min.
GDLW0502P - 600NS	60 min.	1000 typ.	50	125	/	0.024 +/-40%	10.0 min.
GDLW0504P - 200N	20 min.	250 typ.	50	125	5.0	0.014 +/-40%	10.0 min.
GDLW0504P - 600NS	60 min.	1000 typ.	50	125	4.5	0.016 +/-40%	10.0 min.



Product Series Code	**GCMB**	Brand	GOTREND
File Version	GCMB-V2R3	Editor	Teddy
Established Date	2009.07.27	Description	Common Mode Bead Core
Latest Edit Date	2013.02.23		

Features & Application:

* Common Mode Bead Core for High Current Capacity
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* PC / IPC / Handheld Device / LowProfile Device / LCD...

Product Structure

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

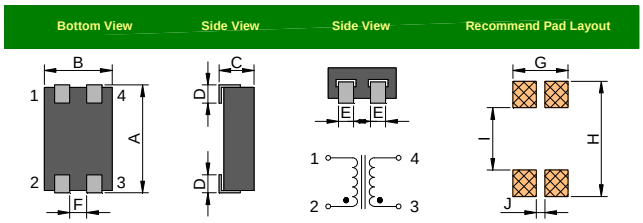
Part No Example:

GCMB - 562585 P - CT5

1 2 3 4

1.GOTREND Series : GCMB
2 Core Size Code : W5.6XH2.5.XL8.5
3. P= Pb free < 1000ppm
4. Material Code : CT5

DIMENSION : [mm]



TYPE	A+/-0.3	B+/-0.3	C+/-0.2	D+/-0.5	E+/-0.2	F+/-0.4	G [ref.]	H [ref.]	I [ref.]	J [ref.]
562585	8.70	5.60	2.80	1.50	1.33	1.40	4.40	9.10	5.30	1.00

Elec.Char:

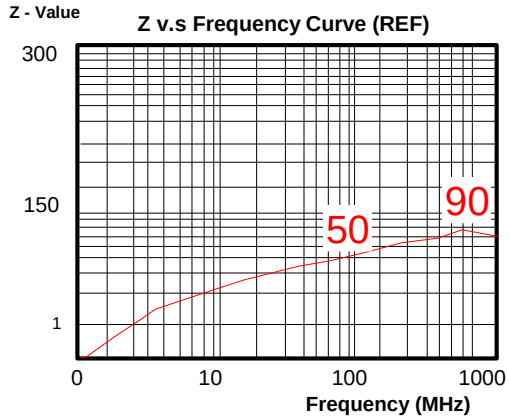
P/N	Impedance	RDC (max)	IDC
GCMB-562585P-CT5	60 ohm(+/-20%)@100MHz	0.005 ohm	5Amp

Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15°C
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:75+/-10%

P/N: GCMB562585P-CT5



Operating & Storage Condition:

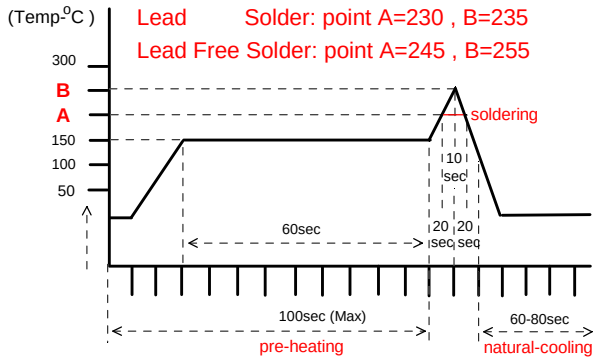
OPERATING TEMP:-40~+85°C

STORAGE TEMP:-40~+85°C
STORAGE LIFE TIME: 12 MONTH @25°C , RH 65%

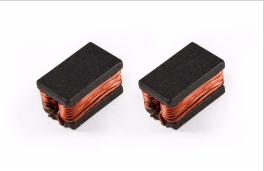
Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260° C



Product Series Code	**GCMC**	Brand	GOTREND
File Version	GCMC-V2R4	Editor	Robert
Established Date	2000.08.26	Description	Common Mode Filter
Latest Edit Date	2013.02.23		

Features & Application:

* Common Mode Filter for high Current Capacity
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard.
* Mobile Device / Handheld Device / LowProfile Device / LCD...

Custom Design

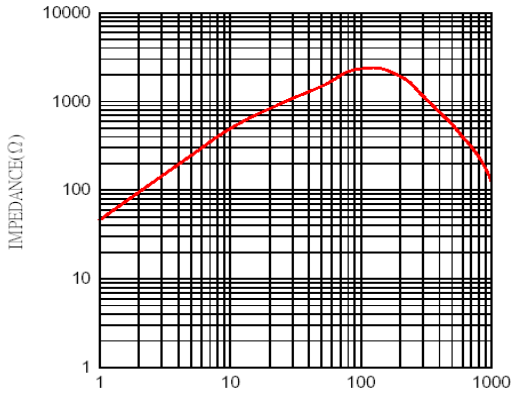
Part No Expression Example:

GCMC	100805	P -	182 -	2P
1	2	3	4	5

1.GOTREND Series : GCMC
2.Type Size Code : 10.0 x 8.0 x 5.0
3.P = Pb free < 1000ppm
4.[Z] Value : Impedance 1800 Ohm
5. 2P : Terminal Lines

Elec.Char:

P/N	Impedance @100MHz		
GCMC100805P-182-2P	1800 ohm Ref.		
	L(100KHz,0.3V)	IDC(Max)	RDC(Max)
	6.8uH (+/- 10%)	4.0Amp	50m OHM



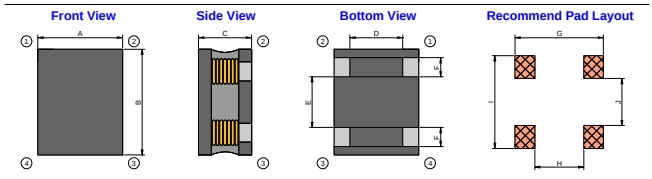
Product Structure

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

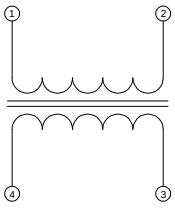
鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

DIMENSION : [mm]



TYPE	A(+/-0.3)	B(+/-0.3)	C(+/-0.3)	D(typ.)	E(typ.)	F(typ.)	G(ref.)	H(ref.)	I(ref.)	J(ref.)
508505	5.0	8.5	5.0	1.0 ~ 1.7	3.0 ~ 5.5	0.8 ~ 2.0	5.6	1.1	9.1	3.7
750603	6.0	7.5	3.0	1.5 ~ 2.5	2.0 ~ 3.5	0.8 ~ 2.0	6.6	1.4	8.1	2.7
100805	8.0	10.0	5.0	2.0 ~ 3.0	3.0 ~ 5.5	1.0 ~ 2.5	8.6	1.9	10.6	3.7
121006	10.0	12.0	6.0	3.0 ~ 4.0	5.5 ~ 7.5	1.0 ~ 3.0	10.6	2.9	12.6	5.9

SCHEMATIC :



Test Equipment :

* HP4284A , HP42841A - L , IDC , Q , RDC
* HP8753D NETWORK ANALYZER - SRF

Standard Atmospheric Conditions :
Ambient Temp : 20 +/- 15°C
Relative Humidity : 65 +/- 20%
If there may be any doubt on the result,
measurement shall be made within the following limits :
Ambient Temp : 25 +/- 5°C
Relative Humidity : 75 +/- 10%

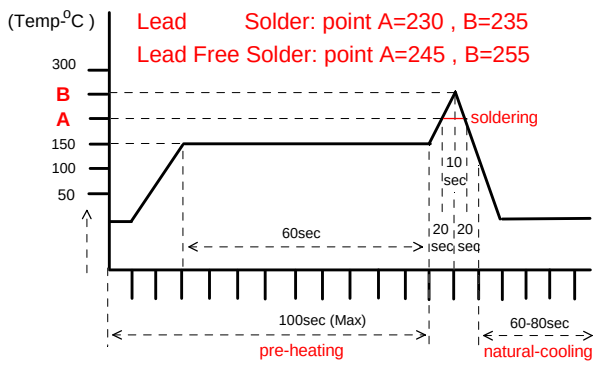
Operating & Storage Condition:

OPERATING TEMP : -40 ~ +85°C
STORAGE TEMP : -40 ~ +85°C
STORAGE LIFE TIME : 12 MONTH @25°C , RH 65%

Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260° C

Product Series Code:	**GDRH4**	Brand:	GOTREND
File Version:	GDRH4-72P-1R2M-V1R4	Editor:	Teddy
Established Date:	2010.08.18	Description:	Dual Winding Shieldeding Inductor
Latest Edit Date:	2013.02.23		

* Features & Application:

1.As a transformer : SPEIC , flyback
2.As an inductor : buck , boost , coupled inductor
3.DC-DC converters
4.VRM inductor for CPU and DDR power supplies
5.Input and output filter chokes

* Product Identify:

Pin Foot	EMI	Color	Made In
SMD	Shield	Black	China / Taiwan

RoHS Compliant – SGS Test Report

Pb	Cd	Hg	Cr+6	PBB	PBDE
<1000ppm	ND	ND	ND	ND	ND

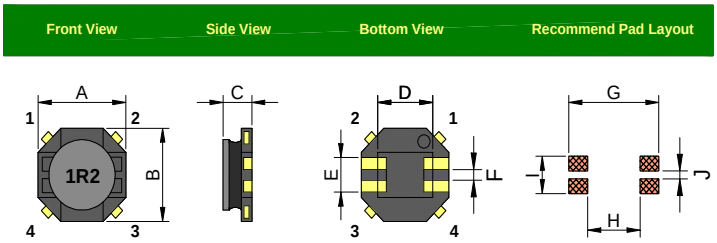
* Part No. Example:

PN	GDRH4	-	72	P	-	1R2	M
ID	1		2	3		4	5

1	GOTREND Series Code
2	Dimension Code: 72 = (L) 7.5 x (W) 7.5 x (H) 2.6 mm
3	RoHS Compliant
4	Inductance : 1R2 = 1.2uH
5	Tolerance : M = 20%

* Dimensions: [mm]

Base replaceable without notice!



Size Code	A (Max)	B (Max)	C (Max)	D (Ref.)	E (+/-0.3)	F (+/-0.5)
72	7.50	7.50	2.60	4.40	2.60	1.00
	G (Ref.)	H (Ref.)	I (Ref.)	J (Ref.)		
	7.20	4.20	2.90	0.90		

* Operating & Storage Condition:

1.Storage Condition -40 ~ +85 ° C (range is application specific)

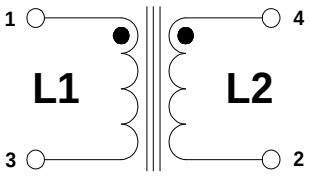
2.Storage Life Time 6 Months @ 20 ° C / RH 65% (no seal off)

3.Operating Condition -40 ~ +125 ° C (range is application specific)

Attention & Caution:

* Keep out of splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condense
* Please be careful for the stress to this product by board flexure or something after the mounting.

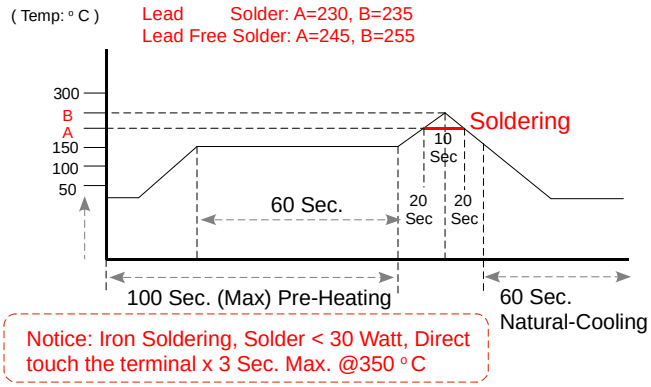
* Schematic:



* Test Condition:

Equipment	1.L – WK3260 LCR Meter 2.RDC – Twintex TM8089A 3.IDC – WK3260+3265B DC-Bias 4.Dimension - Mitutoyo 5.Temperature – TECPEL 305A
Ambient	Temperature 20 ± 5 ° C Humidity RH 65 ± 20%
	If there may be any doubt on the test result, Measurement shall be made within the following limits:
Ambient	Temperature 25 ± 5 ° C Humidity RH 75 ± 10%

* Recommend IR Reflow Curve: GTX-IR-FILE001



Notice: Iron Soldering, Solder < 30 Watt, Direct touch the terminal x 3 Sec. Max. @350 ° C

Product Series Code:	**GDRH4**	Brand:	GOTREND
File Version:	GDRH4-72P-1R2M-V1R4	Editor:	Teddy
Established Date:	2010.08.18	Description:	Dual Winding Shieldeding Inductor
Latest Edit Date:	2013.02.23		

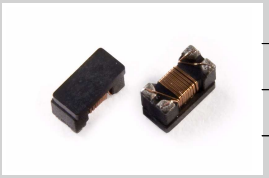
* Electrical Characteristics :

GOTREND PN	Inductance (uH)		DCR (m Ohm)		IDC (A)	
	(1 – 3)	(4 – 2)	(1 – 3)	(4 – 2)	(1 – 3)	(4 – 2)
GDRH4-72P-1R2M	1.2 +/- 20%	1.2 +/- 20%	50.0 max.	50.0 max.	1.0 max.	1.0 max.

- Inductance Test Parameters : @ 100KHz / 0.3V
- IDC Base on L drop 20% max.
- Turns Ratio (1 - 3) : (4 - 2) = 1 : 1
- Winding : (1 - 3) = (4 - 2) = G1-P180 0.15 mm x 2P x 4.5Ts.

* Material List :

NO.	Item	Description	Supplier
1	Drum Core	R9H	SINCORES
2	Base	SC-0016-5 LCP + P2	ATC
3	Wire	Grade 1 P180	ELEKTRISOLA
4	Glue	S-9001A-6B (NH)	WELLS
		Ferrite Glue	ET



Product Series Code	**GTHW**	Brand	GOTREND
File Version	GTHW-V3R4	Editor	Teddy
Established Date	2009.02.24	Description	Common Mode Filter
Latest Edit Date	2013.02.23		

Features & Application:

* Common Mode Filter for high speed signal line

* Fit for signal line circuit : HDMI / USB3.0 / USB2.0 / IEEE1394

* To help you go pass the CE/FCC standard.

* Mobile Device / Handheld Device / LowProfile Device

Product Structure

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

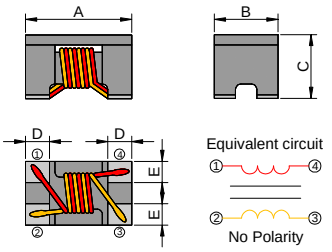
鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example:

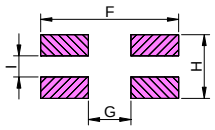
GTHW	3216	P	B	-	601	T
1	2	3	4		5	6

1. GTHW : GOTRED Series Code
2. 3216 : Length 3.2 mm X Width 1.6 mm
3. P : Pb free <1000ppm
4. [E] [B] [D] : Material Code
   [U] [H] : U : For USB3.0 ; H : For HDMI
5. 900 : Impedance [ohm] @ 100MHz = 90 ohm
6. T : Tolerance T = Typical

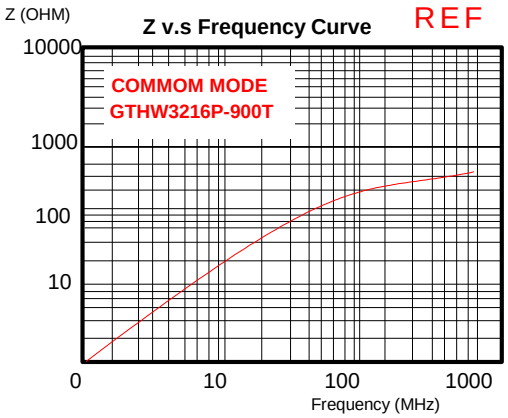
DIMENSION : [mm]

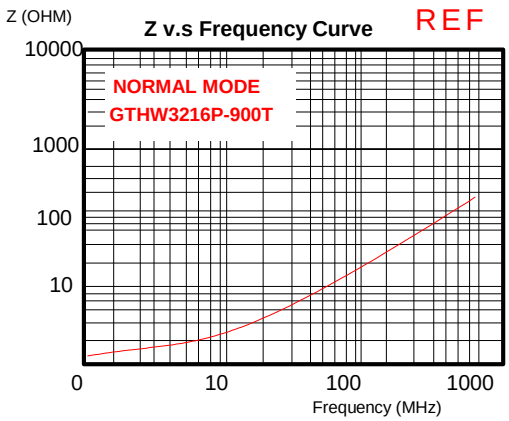


Recommend Pad Layout [mm]



TYPE	A	B	C	D	E	F	G	H	I
GTHW2012	2.0+/-0.2	1.2+/-0.2	1.2+/-0.2	0.4+/-0.2	0.4+/-0.2	2.6 Typ.	0.8 Typ.	1.2 Typ.	0.4 Typ.
GTHW3216	3.2+/-0.2	1.6+/-0.2	2.0+/-0.2	0.6+/-0.2	0.6+/-0.2	3.8 Typ.	1.6 Typ.	1.8 Typ.	0.4 Typ.
GTHW4532	4.5+/-0.2	3.2+/-0.2	2.8+/-0.2	1.0+/-0.1	1.2+/-0.1	5.9 Typ.	3.2 Typ.	3.4 Typ.	1.6 Typ.





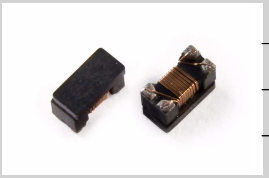
Test Equipment :

* HP4291A-Z, HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15ºC
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5ºC
Relative Humidity:75+/-10%

Size Code & Package Quantity:

JIS CODE	EIA CODE	PCS / REEL	REEL / BOX
2012	0805	2000	5
3216	1206	2000	5
4532	1812	500	5



Product Series Code	**GTHW**	Brand	GOTREND
File Version	GTHW-V3R4	Editor	Teddy
Established Date	2009.02.24	Description	Common Mode Filter
Latest Edit Date	2013.02.23		

Operating & Storage Condition:

OPERATING TEMP:-40~+85ºC

STORAGE TEMP:-40~+85ºC

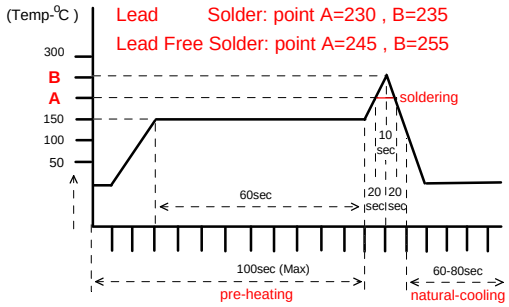
STORAGE LIFE TIME: 12 MONTH @25ºC , RH 65%

Attention & Caution:

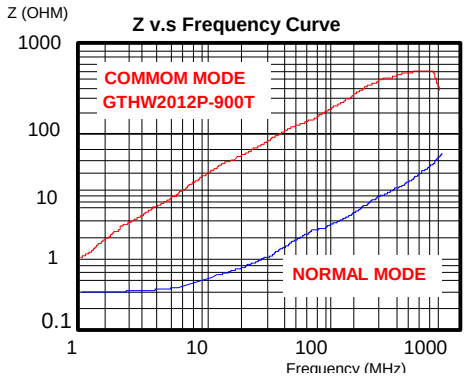
Please avoid following matters:

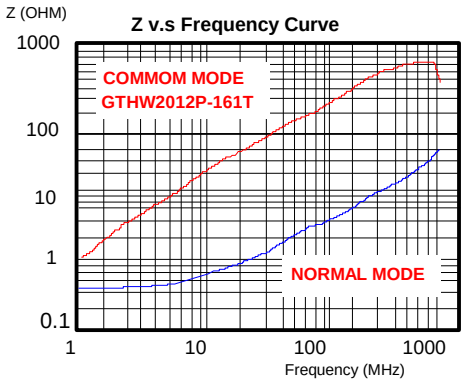
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

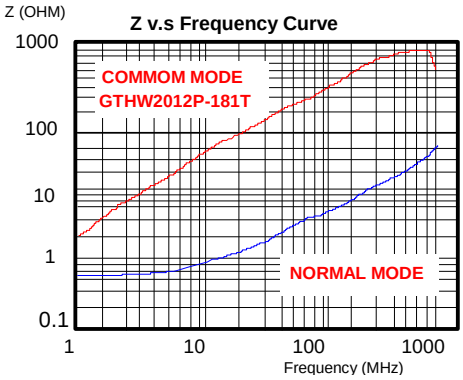
Recommand Reflow Curve (TIME:Second)

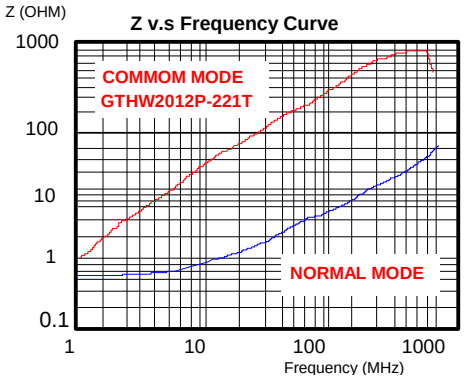


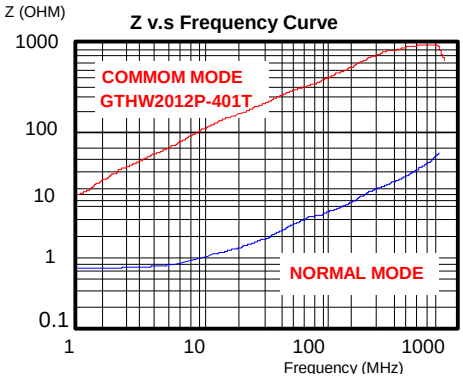
Notice: Iron Soldering: 3 Seconds Max. @260°C

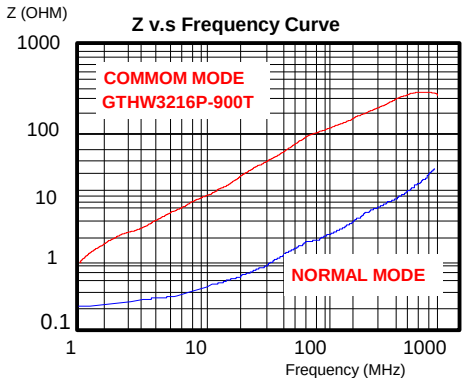


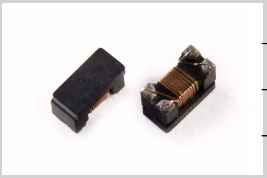




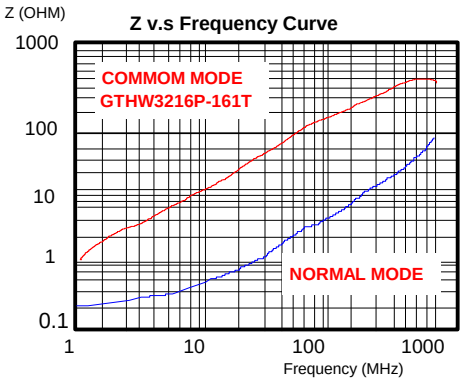


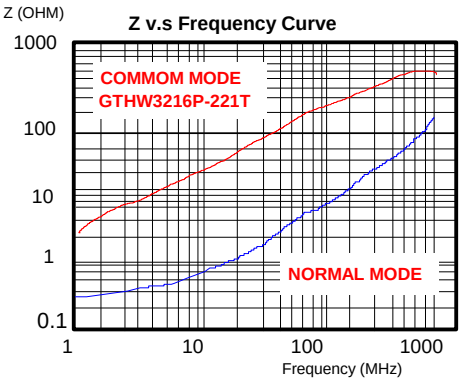


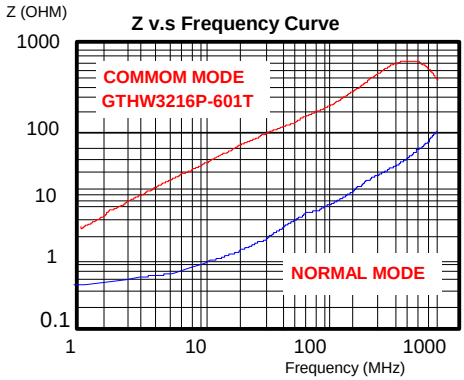


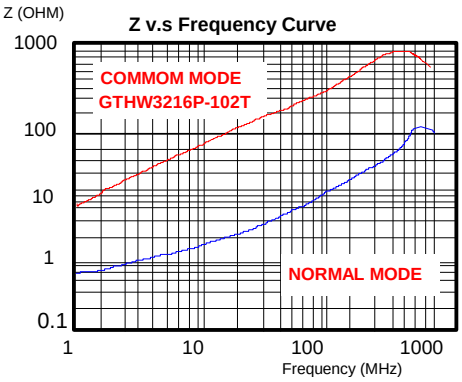


Product Series Code	**GTHW**	Brand	GOTREND
File Version	GTHW-V3R4	Editor	Teddy
Established Date	2009.02.24	Description	Common Mode Filter
Latest Edit Date	2013.02.23		





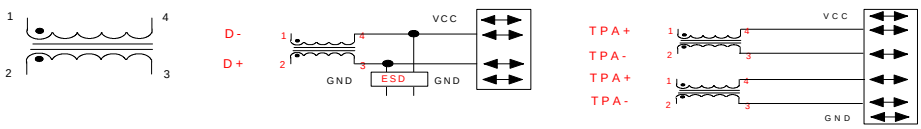


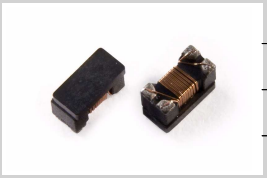


GTHW-XXXX-X-XXXT Common Mode Choke for USB2.0 / IEEE1394

Part No.	Common Mode (Min.)impedance (Ohm)@100MHz	Common Mode (Typ.)impedance (Ohm)@100MHz	Rated Voltage / Withstanding Voltage V(DC)	DCR (Ohm) (max)	Rated Current (mA) (max)	Insulation Res. Min. (m Ohm)
GTHW2012P□- 670T	30	67	50 / 125	0.25	400	10
GTHW2012P□- 900T	60	90	50 / 125	0.30	400	10
GTHW2012P□- 121T	95	120	50 / 125	0.30	370	10
GTHW2012P□- 161T	115	160	50 / 125	0.35	330	10
GTHW2012P□- 181T	135	180	50 / 125	0.35	330	10
GTHW2012P□- 221T	145	220	50 / 125	0.40	330	10
GTHW2012P□- 261T	195	260	50 / 125	0.40	300	10
GTHW2012P□- 361T	200	360	50 / 125	0.40	280	10
GTHW2012P□- 401T	320	400	50 / 125	0.40	50	10
GTHW3216P□- 900T	60	90	50 / 125	0.30	370	10
GTHW3216P□- 121T	90	120	50 / 125	0.30	370	10
GTHW3216P□- 161T	115	160	50 / 125	0.40	340	10
GTHW3216P□- 221T	145	220	50 / 125	0.50	310	10
GTHW3216P□- 601T	425	600	50 / 125	0.80	260	10
GTHW3216P□- 102T	700	1000	50 / 125	1.00	230	10
GTHW3216P□- 222T	1560	2200	50 / 125	1.20	200	10
GTHW4532P□- 110T	300	700	50 / 125	0.60	250	10
GTHW4532P□- 220T	500	1000	50 / 125	1.00	200	10
GTHW4532P□- 510T	1000	2000	50 / 125	1.00	200	10
GTHW4532P□- 101T	2000	5000	50 / 125	3.00	150	10

SCHEMATIC:





Product Series Code	**GLECM**	Brand	GOTREND
File Version	GLECM-V1R2	Editor	Teddy
Established Date	2009.08.20	Description	Common Mode Choke Coil
Latest Edit Date	2013.02.23		

Features & Application:

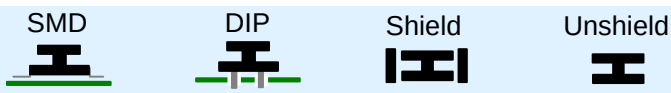
* Common Mode Filter for high speed signal line

* Fit for signal line circuit : HDMI / USB3.0 6.0GHz

* To help you go pass the CE/FCC standard.

* Mobile Device / Handheld Device / LowProfile Device

Product Structure



2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚PBDE
<1000ppm	ND	ND	ND	ND	ND

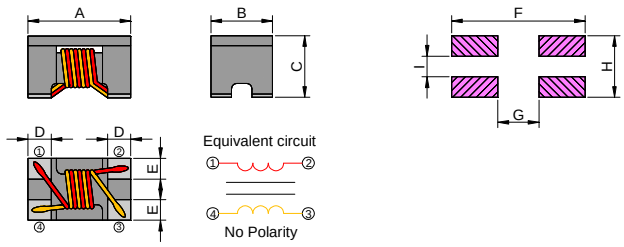
Part No Example:

GLECM 2012 B - 900 Q T
1 2 3 4 5 6

1. GLECM : GOTRED Series Code
2. 2012 : Length 2.0 mm X Width 1.2 mm
3. B : Identification Code [B = USB3.0 6.0 GHz]
   D : Identification Code [D = HDMI 3.5 GHz]
   H : Identification Code [H = HDMI 6.0 GHz]
4. 900 : Impedance [Ohm] @ 100MHz = 90 Ohm
5. Q : Impedance Tolerance [60 ~ 100 Ohm]
6. T : Reel Tapping

DIMENSION : [mm]

Recommend Pad Layout [mm]



TYPE	A	B	C	D	E	F	G	H	I
1210	1.2+/-0.2	1.0+/-0.2	1.0 Max.	0.35 typ.	0.35 typ.	1.55 ref.	0.65 ref.	1.10 ref.	0.30 ref.
2012	2.0+/-0.2	1.2+/-0.2	1.2+/-0.2	0.50 typ.	0.45 typ.	2.60 ref.	0.80 ref.	1.30 ref.	0.40 ref.

Test Equipment :

* Agilent E4287A - Impedance
* Zentech 502BC - DC Resistance
* Agilent 4339B - Insulation Resistance

Standard Atmospheric Conditions:
Ambient Temp:20+/-15°C
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:75+/-10%

Size Code & Package Quantity:

JIS CODE	EIA CODE	PCS / REEL	REEL / BOX
1210	0504	4,000	5
2012	0805	2,000	5

Operating & Storage Condition:

OPERATING TEMP : -40~+85°C

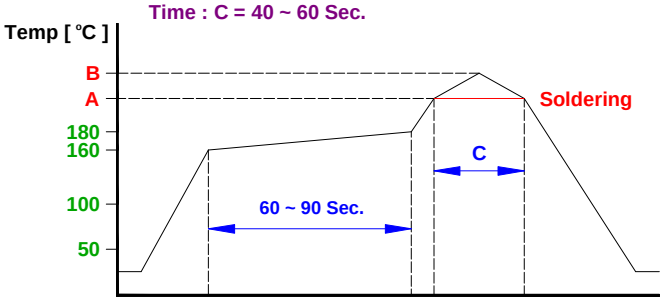
STORAGE TEMP : -40~+85°C
STORAGE LIFE TIME : 12 MONTH @25°C , RH 65%

Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

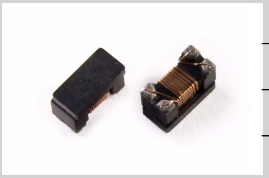
Recommend IR Reflow Curve :

Lead Free Solder : A = 217 °C B = 245 +/- 5 °C
Time : C = 40 ~ 60 Sec.



Notice : Iron Soldering , Solder < 30 Watt , Direct touch the terminal x 3 Sec. Max. @ 350 °C

GOTREND Technology Co., Ltd.
http://www.gotrend.com.tw

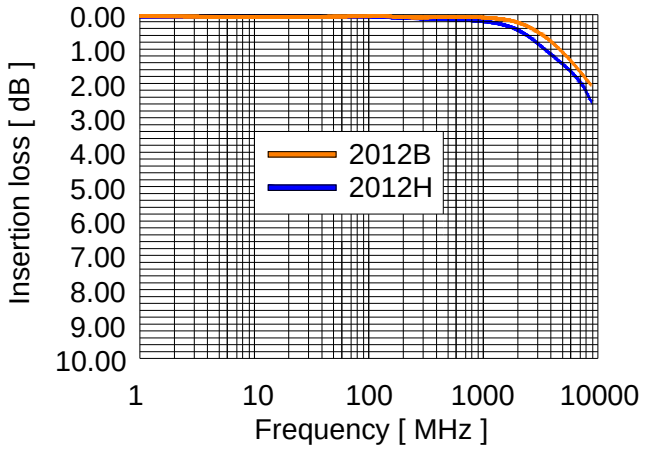


Product Series Code	**GLECM**	Brand	GOTREND
File Version	GLECM-V1R2	Editor	Teddy
Established Date	2009.08.20	Description	Common Mode Choke Coil
Latest Edit Date	2013.02.23		

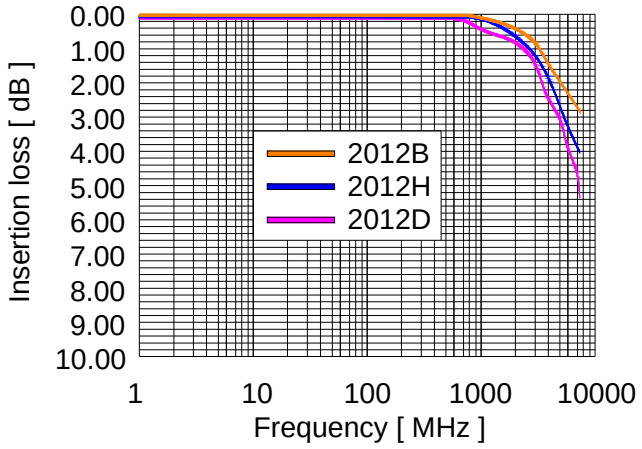
Electrical Spec. :

Part No.	Common Mode impedance(Ohm) @100MHz	DCR (Ohm) (max)	Rated Current (mA) (max)	Rated Voltage V(DC)	Cut-off Freq.(GHz) (typ.)	Insulation Res. (M Ohm) (min.)
GLECM1210B-600QT	60 Typ.	0.4	300	20	10.0	10
GLECM1210H-900QT	90 Typ.	0.5	280	20	8.0	10
GLECM2012B-900QT	60 Min. / 100 Max.	0.3	300	20	6.0	10
GLECM2012D-900QT	65 Min. / 100 Max.	0.3	300	20	3.5	10
GLECM2012H-900QT	65 Min. / 100 Max.	0.3	300	20	6.0	10
GLECM2012H-300BT	65_Min. / 100 Max.	0.35	350	20	/	10

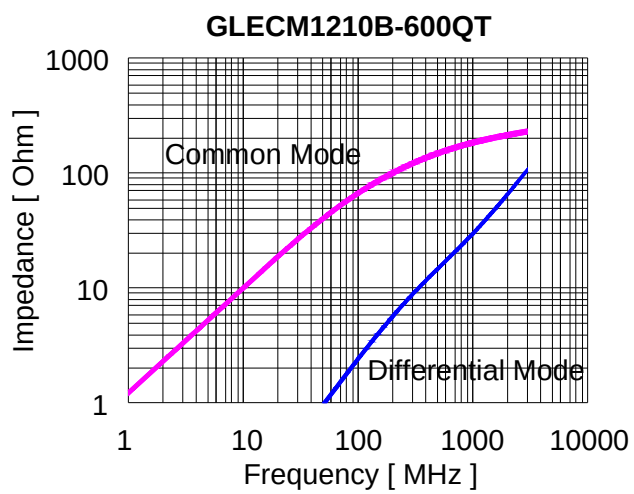
Insertion Loss Graphic result :



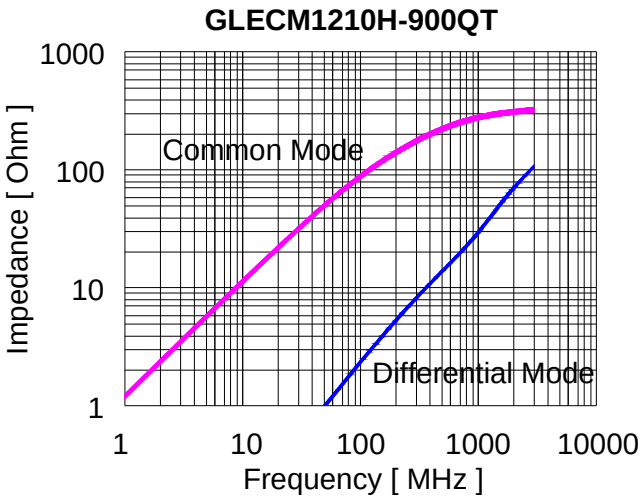
Insertion Loss Graphic result :

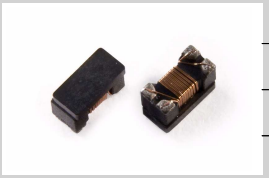


Impedance vs. Frequency Curve / Common Mode and Differential Mode :



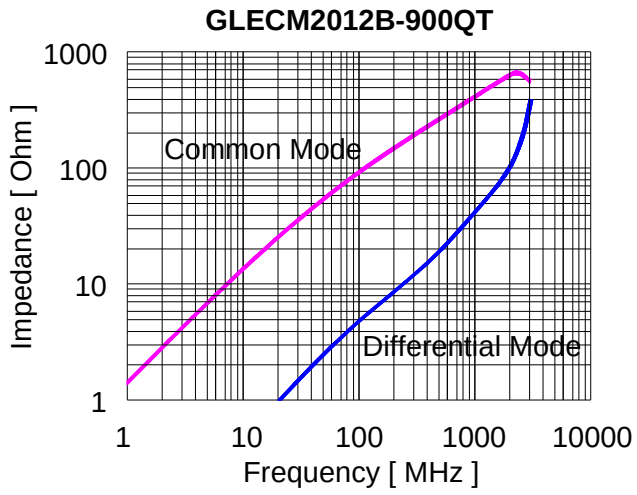
Impedance vs. Frequency Curve / Common Mode and Differential Mode :



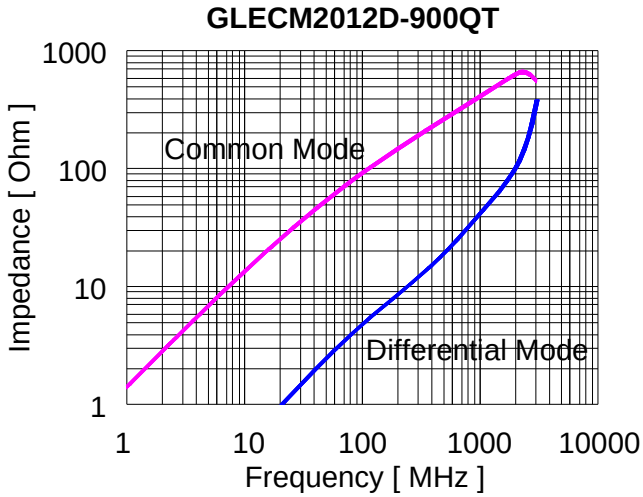


Product Series Code	**GLECM**	Brand	GOTREND
File Version	GLECM-V1R2	Editor	Teddy
Established Date	2009.08.20	Description	Common Mode Choke Coil
Latest Edit Date	2013.02.23		

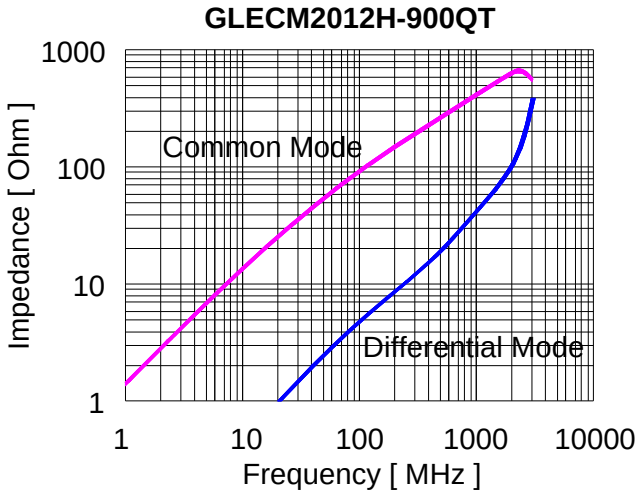
Impedance vs. Frequency Curve / Common Mode and Differential Mode :

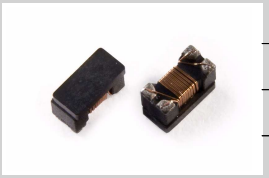


Impedance vs. Frequency Curve / Common Mode and Differential Mode :



Impedance vs. Frequency Curve / Common Mode and Differential Mode :



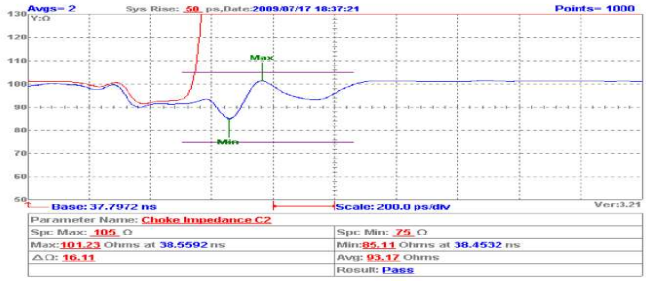


Product Series Code	**GLECM**	Brand	GOTREND
File Version	GLECM-V1R2	Editor	Teddy
Established Date	2009.08.20	Description	Common Mode Choke Coil
Latest Edit Date	2013.02.23		

Mated Connector Impedance Matching result & Eye Diagram Graphic result :

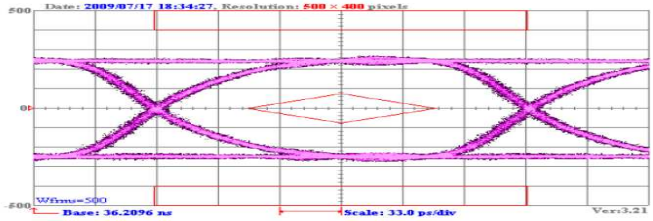
GLECM2012B-900QT

Mated Connector Impedance Matching result



Parameter Name: Choke Impedance C2	
Spc Max: 105 Ω	Spc Min: 75 Ω
Max:101.23 Ohms at 38.5592 ns	Min:85.11 Ohms at 38.4532 ns
ΔΩ: 16.11	Avg: 93.17 Ohms
	Result: Pass

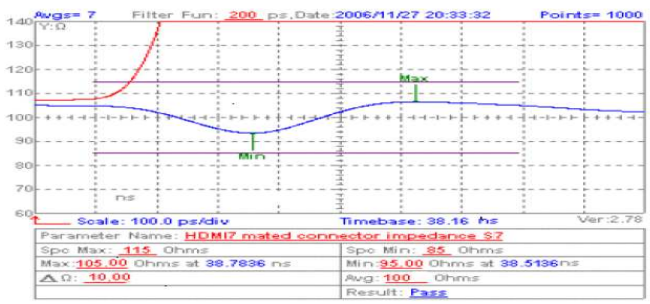
Eye Diagram Graphic result



Parameter Name: USB3.0 Eye C1	
Display Mode: USB3.0 5Gbs	
dRate: 5 Gbits/s; 200.0 ps	V: 250 mV;Gain: 0 dB;Off: 0 mV
JGen: OFF	Result: Pass

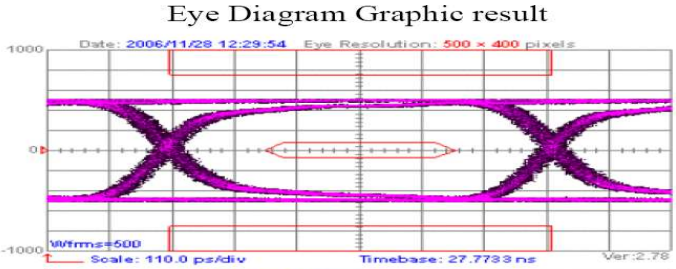
GLECM2012D-900QT

Mated Connector Impedance Matching result



Parameter Name: HDMI7 mated connector impedance S7	
Spc Max: 115 Ohms	Spc Min: 85 Ohms
Max:105.00 Ohms at 38.7836 ns	Min:95.00 Ohms at 38.5136ns
ΔΩ: 10.00	Avg:100 Ohms
	Result: Pass

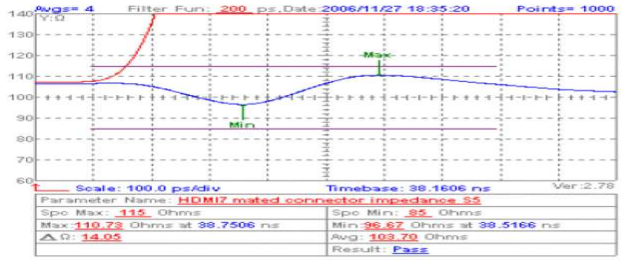
Eye Diagram Graphic result



Parameter Name: HDMI7 eye diagram S7	
Display Mode: EIA/CEA-861B: 1920 × 1080p, 60 Hz; pixel clock 148.5 MHz	
dRate: 1.485 Gbits/s; 673.4 ps	V_Amp: 500 mV; Offset: 0 mV
JGen: OFF	Result: Pass

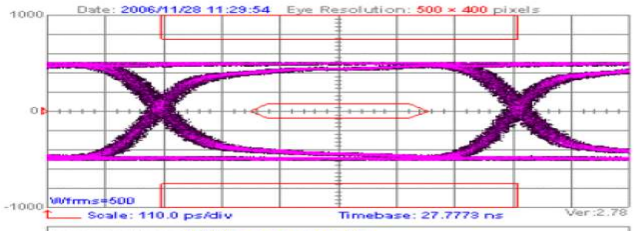
GLECM2012H-900QT

Mated Connector Impedance Matching resul

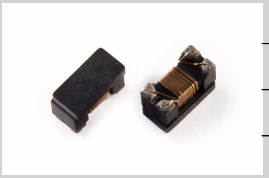


Parameter Name: HDMI7 mated connector impedance S5	
Spc Max: 115 Ohms	Spc Min: 85 Ohms
Max:110.73 Ohms at 38.7506 ns	Min:96.67 Ohms at 38.5166 ns
ΔΩ: 14.05	Avg: 103.70 Ohms
	Result: Pass

Eye Diagram Graphic result



Parameter Name: HDMI7 eye diagram S5	
Display Mode: EIA/CEA-861B: 1920 × 1080p, 60 Hz; pixel clock 148.5 MHz	
dRate: 1.485 Gbits/s; 673.4 ps	V_Amp: 500 mV; Offset: 0 mV
JGen: OFF	Result: Pass



Product Series Code	**GCMF**	Brand	GOTREND
File Version	GCMF-V1R4	Editor	Teddy
Established Date	2011.12.23	Description	Common Mode Choke Coil
Latest Edit Date	2013.02.23		

Features & Application:

* Common Mode Filter for high speed signal line
* Fit for signal line circuit : HDMI / USB3.0 6.0GHz
* To help you go pass the CE/FCC standard.
* Mobile Device / Handheld Device / LowProfile Device

Product Structure

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

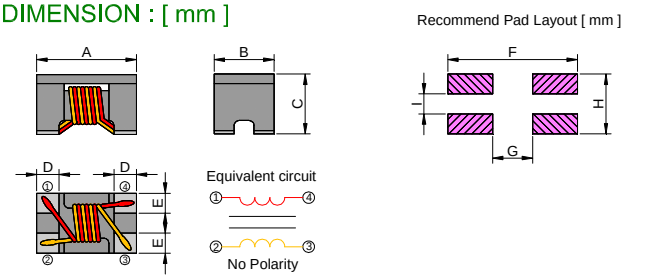
鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example:

GCMF (1) 2012 (2) P (3) □ (4) - 900 (5) T (6)

1. GCMF : GOTRED Series Code
2. 2012 : Length 2.0 mm X Width 1.2 mm
3. P : Pb < 1000 ppm
4. U : Identification Code [U = 6.0 GHz]
   H : Identification Code [H = 4.0 GHz]
   N : Identification Code [N = 7.5 GHz]
5. 900 : Impedance [Ohm] @ 100MHz = 90 Ohm
6. T : Reel Tapping

DIMENSION : [mm]



TYPE	A	B	C	D	E	F	G	H	I
1210	1.2+/-0.2	1.0+/-0.2	0.9 max.	0.33 typ.	0.36 typ.	1.50 ref.	0.60 ref.	1.20 ref.	0.30 ref.
2012	2.0+/-0.2	1.2+/-0.2	1.2+/-0.2	0.45 typ.	0.40 typ.	2.60 ref.	1.00 ref.	1.20 ref.	0.40 ref.

Test Equipment :

* Agilent E4991A - Impedance
* Chroma 16502 - DC Resistance
* Agilent 4339B - Insulation Resistance

Standard Atmospheric Conditions:
Ambient Temp:20+/-15ºC
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5ºC
Relative Humidity:75+/-10%

Size Code & Package Quantity:

JIS CODE	EIA CODE	PCS / REEL	REEL / BOX
1210	0504	3,000	5
2012	0805	2,000	5

Operating & Storage Condition:

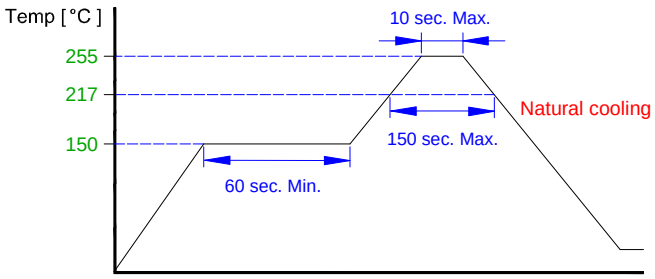
OPERATING TEMP : -25~+85ºC

STORAGE TEMP : -25~+85ºC
STORAGE LIFE TIME : 12 MONTH @25ºC , RH 65%

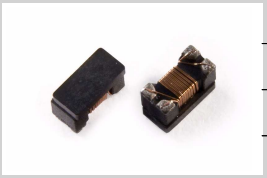
Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Recommend IR Reflow Curve :



Notice : Iron Soldering , Solder < 30 Watt , Direct touch the terminal x 3 Sec. Max. @ 350 ℃



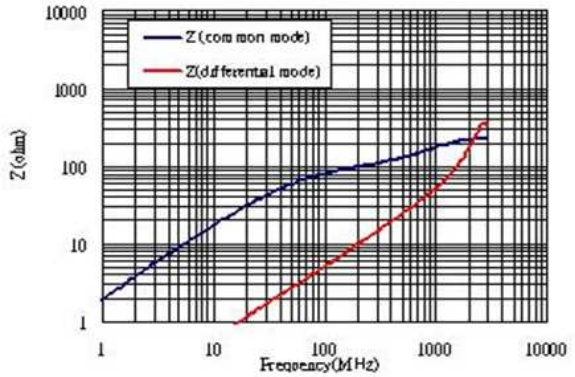
Product Series Code	**GCMF**	Brand	GOTREND
File Version	GCMF-V1R4	Editor	Teddy
Established Date	2011.12.23	Description	Common Mode Choke Coil
Latest Edit Date	2013.02.23		

Electrical Spec. :

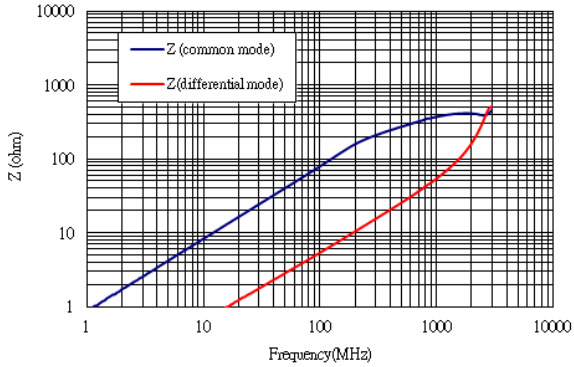
Part No.	Common Mode impedance(Ohm) @100MHz	DCR (Ohm) (max)	Rated Current (mA) (max)	Rated Voltage V(DC)	Cut-off Freq.(GHz) (typ.)	Insulation Res. (M Ohm) (min.)
GCMF1210PN - 250T	25 Typ.	0.3	300	20	7.5 Type.	10
GCMF1210PN - 600T	60 Typ.	0.4	300	20	7.5 Type.	10
GCMF1210PN - 670T	67 Typ.	0.3	250	50	7.5 Type.	10
GCMF1210PN - 900T	90 Typ.	0.5	280	20	7.5 Type.	10
GCMF2012PU - 900T	65 Min. / 90 Typ.	0.25	300	20	6	10
GCMF2012PH - 900T	65 Min. / 90 Typ.	0.25	300	20	4	10

Impedance vs. Frequency Curve / Common Mode and Differential Mode :

GCMF2012PU-900T

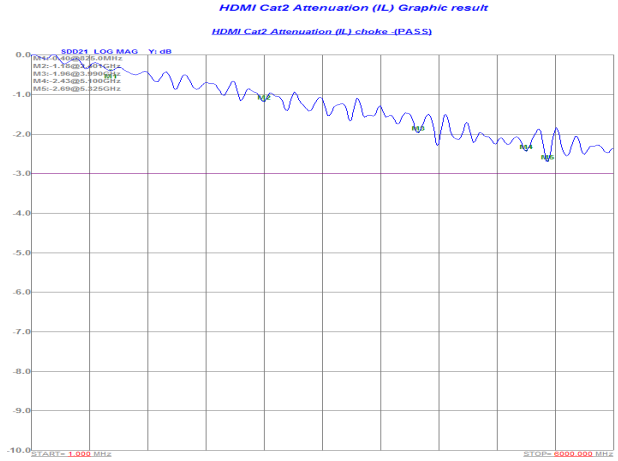


GCMF2012PH-900T

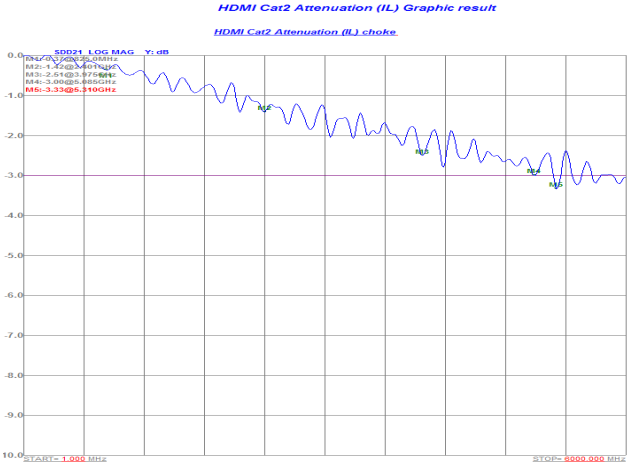


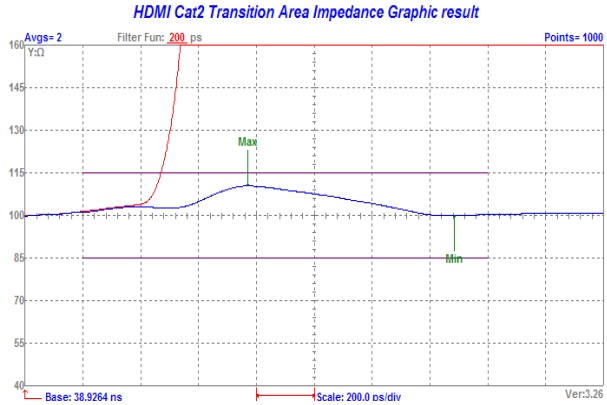
Insertion Loss Graphic result :

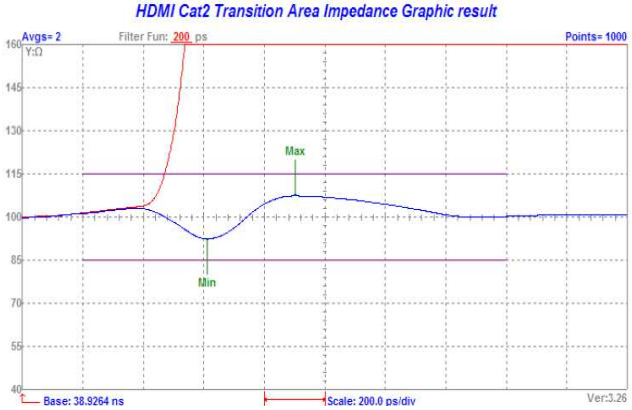
GCMF2012PU-900T



GCMF2012PH-900T







Product Series Code	**GBD**	Brand	GOTREND
File Version	GBD-V4R5	Editor	Teddy
Established Date	2009.07.24	Description	Multilayer Ferrite Chip Bead
Latest Edit Date	2013.02.23		

Features & Application:

* EMI Suppressor for Wide Band / Narrow Band / High Current

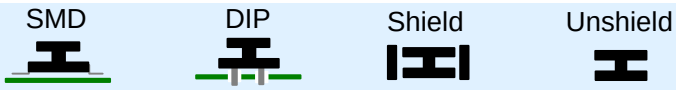
* Fit for power line & signal line circuit

* To help you go pass the CE/FCC standard.

* Mobile Device / Handheld Device / LowProfile Device / Panel...

Product Structure

SMD | DIP | Shield | Unshield



2005 RoHS Compliant - SGS Certified Result

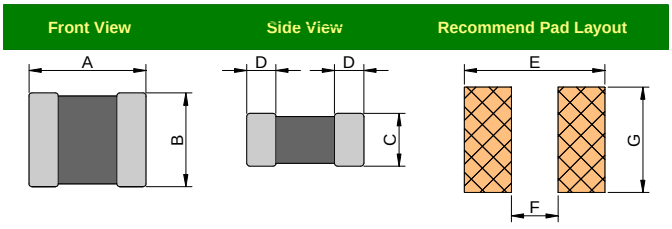
鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example:

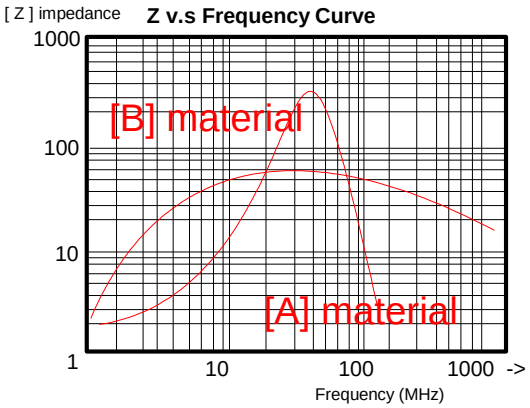
GBD	201209	P	GA	601	N
1	2	3	4	5	6

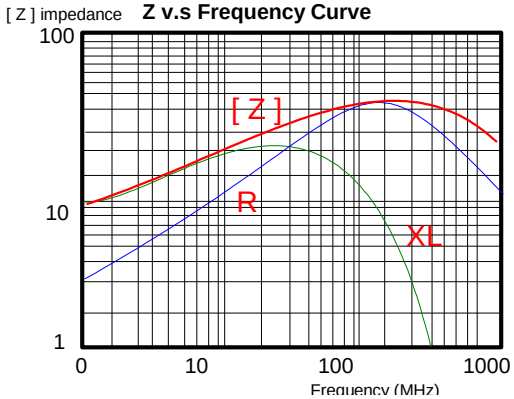
1. GBD : GOTREND Series
2. 201209 : Length 2.0mm X Width 1.2mm x Height 0.9mm
3. P : Pb < 1000ppm
4. GA : Normal Curve (General purpose use)
   GB : Sharp Curve (Narrow band)
   GH : High-Current
   GZ : GHz Band Bead GA, GB, GH
5. 601 : Impedance (ohm) = 600 ohm
6. N : Tolerance M=20%, N=25%

DIMENSION : [mm]



TYPE	A	B	C	D	E	F	G
060303	0.60+/-0.03	0.30+/-0.03	0.30+/-0.03	0.10 ~ 0.20	0.70 ref.	0.30 ref.	0.40 ref.
100505	1.00+/-0.15	0.50+/-0.15	0.50+/-0.15	0.25+/-0.15	1.10 ref.	0.40 ref.	0.60 ref.
160808	1.60+/-0.15	0.80+/-0.15	0.80+/-0.15	0.40+/-0.20	1.80 ref.	0.60 ref.	1.00 ref.
201209	2.00+/-0.20	1.25+/-0.20	0.90+/-0.20	0.50+/-0.30	2.40 ref.	0.80 ref.	1.45 ref.





Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15ºC
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5ºC
Relative Humidity:75+/-10%

Size Code & Package Quantity :

JIS CODE	EIA CODE	PCS / REEL	REEL / BOX
0603	0201	15000	5
1005	0402	10000	5
1608	0603	4000	5
201209	0805	4000	5

Product Series Code	**GBD**	Brand	GOTREND
File Version	GBD-V4R5	Editor	Teddy
Established Date	2009.07.24	Description	Multilayer Ferrite Chip Bead
Latest Edit Date	2013.02.23		

Operating & Storage Condition:

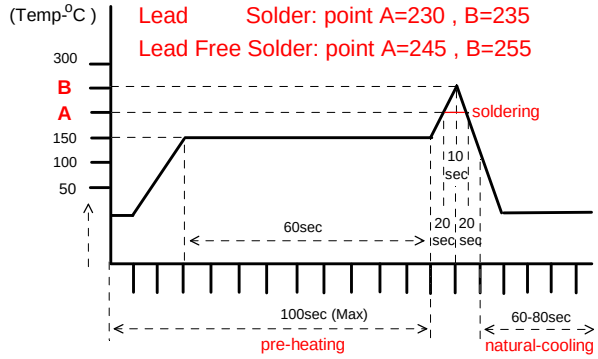
OPERATING TEMP:-40~+85°C

STORAGE TEMP:-40~+85°C
STORAGE LIFE TIME: 12 MONTH @25°C , RH 65%

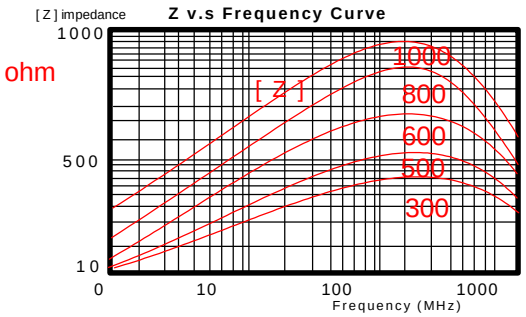
Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

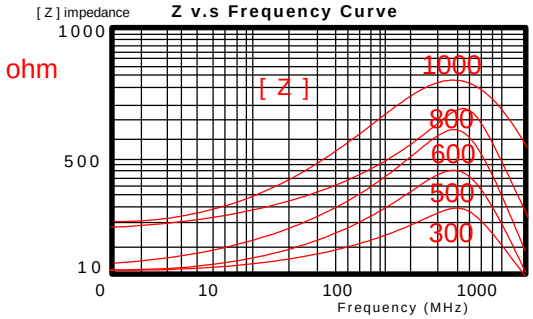
Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260° C



GBD[A][H] Series [Z] Value Curve



GBD[B] Series [Z] Value Curve

Product Series Code	**GBD**	Brand	GOTREND
File Version	GBD-V4R5	Editor	Teddy
Established Date	2009.07.24	Description	Multilayer Ferrite Chip Bead
Latest Edit Date	2013.02.23		

GBDXXXXXXGAXXXX GA Series for Normal Usage

Part No.	Z - Value (ohm) (+/- 25%)	Test Freq. (MHz)	DCR (ohm) (max)	Rated Current (mA) (max)
GBD060303PGA121N	120	100	0.45	200
GBD060303PGA151N	150	100	0.50	200
GBD100505PGA060N	6	100	0.05	500
GBD100505PGA100N	10	100	0.05	500
GBD100505PGA300N	30	100	0.20	300
GBD100505PGA330N	33	100	0.20	300
GBD100505PGA400N	40	100	0.30	300
GBD100505PGA750N	75	100	0.40	300
GBD100505PGA800N	80	100	0.40	200
GBD100505PGA101N	100	100	0.45	200
GBD100505PGA121N	120	100	0.50	200
GBD100505PGA221N	220	100	0.50	200
GBD100505PGA241N	240	100	0.50	200
GBD100505PGA301N	300	100	0.75	100
GBD100505PGA481N	480	100	0.80	200
GBD100505PGA601N	600	100	1.00	200
GBD100505PGA102N	1000	100	1.50	100
GBD100505PGA152N	1500	100	2.00	60
GBD160808PGA100N	10	100	0.02	500
GBD160808PGA110N	11	100	0.05	500
GBD160808PGA190N	19	100	0.08	500
GBD160808PGA220N	22	100	0.10	400
GBD160808PGA250N	25	100	0.10	400
GBD160808PGA260N	26	100	0.10	400
GBD160808PGA300N	30	100	0.10	400
GBD160808PGA310N	31	100	0.10	400
GBD160808PGA400N	40	100	0.10	400
GBD160808PGA470N	47	100	0.10	300
GBD160808PGA500N	50	100	0.10	300
GBD160808PGA600N	60	100	0.10	300
GBD160808PGA700N	70	100	0.15	300
GBD160808PGA750N	75	100	0.15	300
GBD160808PGA800N	80	100	0.15	300
GBD160808PGA900N	90	100	0.20	300
GBD160808PGA101N	100	100	0.20	300
GBD160808PGA121N	120	100	0.25	300
GBD160808PGA151N	150	100	0.30	200
GBD160808PGA181N	180	100	0.30	200
GBD160808PGA201N	200	100	0.30	200
GBD160808PGA221N	220	100	0.30	200
GBD160808PGA241N	240	100	0.40	200
GBD160808PGA301N	300	100	0.40	200
GBD160808PGA331N	330	100	0.50	200
GBD160808PGA401N	400	100	0.30	400
GBD160808PGA451N	450	100	0.50	200
GBD160808PGA471N	470	100	0.50	200
GBD160808PGA501N	500	100	0.50	200
GBD160808PGA601N	600	100	0.50	200
GBD160808PGA751N	750	100	0.70	200
GBD160808PGA102N	1000	100	0.70	200

Product Series Code	**GBD**	Brand	GOTREND
File Version	GBD-V4R5	Editor	Teddy
Established Date	2009.07.24	Description	Multilayer Ferrite Chip Bead
Latest Edit Date	2013.02.23		

GBDXXXXXXGAXXXX GA Series for Normal Usage

Part No.	Z - Value (ohm) (+/- 25%)	Test Freq. (MHz)	DCR (ohm) (max)	Rated Current (mA) (max)
GBD201209PGA070N	7	100	0.10	600
GBD201209PGA090N	9	100	0.10	600
GBD201209PGA110N	11	100	0.10	600
GBD201209PGA170N	17	100	0.10	600
GBD201209PGA190N	19	100	0.10	600
GBD201209PGA220N	22	100	0.10	600
GBD201209PGA260N	26	100	0.10	600
GBD201209PGA300N	30	100	0.10	600
GBD201209PGA310N	31	100	0.10	600
GBD201209PGA320N	32	100	0.10	300
GBD201209PGA400N	40	100	0.10	500
GBD201209PGA470N	47	100	0.10	500
GBD201209PGA500N	50	100	0.10	500
GBD201209PGA600N	60	100	0.15	500
GBD201209PGA700N	70	100	0.15	500
GBD201209PGA800N	80	100	0.15	500
GBD201209PGA900N	90	100	0.15	500
GBD201209PGA101N	100	100	0.25	300
GBD201209PGA121N	120	100	0.25	300
GBD201209PGA151N	150	100	0.25	300
GBD201209PGA201N	200	100	0.30	300
GBD201209PGA221N	220	100	0.30	300
GBD201209PGA301N	300	100	0.30	300
GBD201209PGA331N	330	100	0.30	300
GBD201209PGA401N	400	100	0.30	300
GBD201209PGA451N	450	100	0.40	300
GBD201209PGA471N	470	100	0.40	300
GBD201209PGA501N	500	100	0.40	300
GBD201209PGA601N	600	100	0.40	300
GBD201209PGA751N	750	100	0.50	200
GBD201209PGA102N	1000	100	0.50	200
GBD201209PGA122N	1200	100	0.60	200
GBD201209PGA152N	1500	100	0.60	200
GBD201209PGA202N	2000	100	0.60	200
GBD201209PGA222N	2200	100	0.60	200
GBD201209PGA252N	2500	100	0.70	200
GBD201209PGA272N	2700	100	0.70	200

Product Series Code	**GBD**	Brand	GOTREND
File Version	GBD-V4R5	Editor	Teddy
Established Date	2009.07.24	Description	Multilayer Ferrite Chip Bead
Latest Edit Date	2013.02.23		

GBDXXXXXXGBXXXX GB Series for Narrow-Band Signal Line use

Part No.	Z - Value (ohm)	Test Freq. (MHz)	DCR (ohm) (max)	Rated Current (mA) (max)
GBD100505PGB060N	6	100	0.10	300
GBD100505PGB100N	10	100	0.20	200
GBD100505PGB400N	40	100	0.40	150
GBD100505PGB800N	80	100	0.60	100
GBD100505PGB121N	120	100	0.80	50
GBD160808PGB060N	6	100	0.05	500
GBD160808PGB100N	10	100	0.07	400
GBD160808PGB300N	30	100	0.30	300
GBD160808PGB400N	40	100	0.30	300
GBD160808PGB470N	47	100	0.30	300
GBD160808PGB600N	60	100	0.30	300
GBD160808PGB750N	75	100	0.40	300
GBD160808PGB800N	80	100	0.40	300
GBD160808PGB101N	100	100	0.40	300
GBD160808PGB121N	120	100	0.40	300
GBD160808PGB131N	130	100	0.40	300
GBD160808PGB151N	150	100	0.40	300
GBD160808PGB221N	220	100	0.40	200
GBD160808PGB241N	240	100	0.40	200
GBD160808PGB301N	300	100	0.50	200
GBD160808PGB481N	480	100	0.60	150
GBD160808PGB601N	600	100	0.60	100
GBD160808PGB102N	1000	100	0.70	100
GBD160808PGB152N	1500	100	0.80	100
GBD160808PGB182N	1800	100	0.95	100
GBD160808PGB222N	2200	100	1.50	50
GBD201209PGB060N	6	100	0.07	800
GBD201209PGB110N	11	100	0.10	700
GBD201209PGB260N	26	100	0.20	600
GBD201209PGB300N	30	100	0.20	600
GBD201209PGB320N	32	100	0.20	600
GBD201209PGB400N	40	100	0.30	500
GBD201209PGB600N	60	100	0.30	500
GBD201209PGB750N	75	100	0.30	500
GBD201209PGB900N	90	100	0.30	500
GBD201209PGB101N	100	100	0.40	400
GBD201209PGB121N	120	100	0.40	400
GBD201209PGB151N	150	100	0.40	400
GBD201209PGB171N	170	100	0.50	400
GBD201209PGB201N	200	100	0.50	300
GBD201209PGB221N	220	100	0.50	300
GBD201209PGB301N	300	100	0.50	300
GBD201209PGB401N	400	100	0.50	300
GBD201209PGB501N	500	100	0.50	200
GBD201209PGB601N	600	100	0.50	200
GBD201209PGB751N	750	100	0.60	100
GBD201209PGB102N	1000	100	0.60	100
GBD201209PGB122N	1200	100	0.70	100
GBD201209PGB152N	1500	100	0.70	100
GBD201209PGB222N	2200	100	0.75	100
GBD201209PGB272N	2700	100	0.85	100

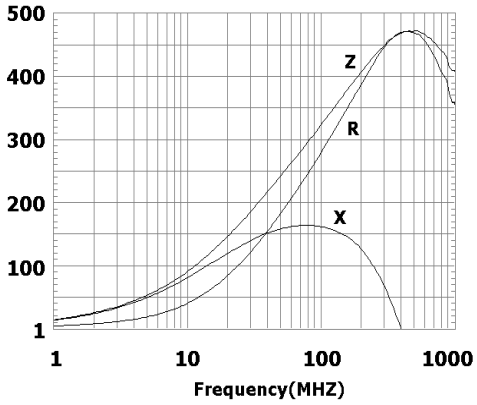
Product Series Code	**GBD**	Brand	GOTREND
File Version	GBD-V4R5	Editor	Teddy
Established Date	2009.07.24	Description	Multilayer Ferrite Chip Bead
Latest Edit Date	2013.02.23		

GBDXXXXXXGHXXXX GH Series for High-Current use

Part No.	Z - Value (ohm)	Test Freq. (MHz)	DCR (ohm) (max)	Rated Current (mA) (max)
GBD100505PGH100N	10 ± 25%	100	0.030	2000
GBD100505PGH300N	30 ± 25%	100	0.050	1700
GBD100505PGH600N	60 ± 25%	100	0.080	1500
GBD100505PGH800N	80 ± 25%	100	0.090	1200
GBD100505PGH121N	120 ± 25%	100	0.090	1200
GBD160808PGH100N	10 ± 25%	100	0.020	4000
GBD160808PGH110N	11 ± 25%	100	0.020	4000
GBD160808PGH220N	22 ± 25%	100	0.040	3000
GBD160808PGH250N	25 ± 25%	100	0.030	3000
GBD160808PGH300N	30 ± 25%	100	0.030	3000
GBD160808PGH400N	40 ± 25%	100	0.035	3000
GBD160808PGH600N	60 ± 25%	100	0.040	3000
GBD160808PGH700N	70 ± 25%	100	0.050	2500
GBD160808PGH750N	75 ± 25%	100	0.050	2500
GBD160808PGH800N	80 ± 25%	100	0.050	2500
GBD160808PGH900N	90 ± 25%	100	0.050	2500
GBD160808PGH101N	100 ± 25%	100	0.050	2500
GBD160808PGH121N	120 ± 25%	100	0.050	2500
GBD160808PGH151N	150 ± 25%	100	0.080	2000
GBD160808PGH181N	180 ± 25%	100	0.080	2000
GBD160808PGH201N	200 ± 25%	100	0.100	2000
GBD160808PGH221N	220 ± 25%	100	0.100	2000
GBD160808PGH301N	300 ± 25%	100	0.100	2000
GBD160808PGH331N	330 ± 25%	100	0.150	1500
GBD160808PGH391N	390 ± 25%	100	0.140	1000
GBD160808PGH471N	470 ± 25%	100	0.150	1500
GBD160808PGH501N	500 ± 25%	100	0.150	1500
GBD160808PGH601N	600 ± 25%	100	0.200	1000
GBD160808PGH102N	1000 ± 25%	100	0.250	800
GBD160808PGH202N	2000 ± 25%	100	0.500	500
GBD201209PGH070N	7 ± 25%	100	0.010	6000
GBD201209PGH110N	11 ± 25%	100	0.010	6000
GBD201209PGH170N	17 ± 25%	100	0.020	5000
GBD201209PGH220N	22 ± 25%	100	0.020	4000
GBD201209PGH270N	27 ± 25%	100	0.020	4000
GBD201209PGH310N	31 ± 25%	100	0.020	4000
GBD201209PGH400N	40 ± 25%	100	0.020	3000
GBD201209PGH500N	50 ± 25%	100	0.025	3000
GBD201209PGH600N	60 ± 25%	100	0.030	3000
GBD201209PGH700N	70 ± 25%	100	0.040	3000
GBD201209PGH750N	75 ± 25%	100	0.040	3000
GBD201209PGH800N	80 ± 25%	100	0.040	3000
GBD201209PGH900N	90 ± 25%	100	0.040	3000
GBD201209PGH101N	100 ± 25%	100	0.040	3000
GBD201209PGH121N	120 ± 25%	100	0.040	3000
GBD201209PGH151N	150 ± 25%	100	0.050	2500
GBD201209PGH181N	180 ± 25%	100	0.050	2500
GBD201209PGH201N	200 ± 25%	100	0.050	2500
GBD201209PGH221N	220 ± 25%	100	0.080	2000
GBD201209PGH301N	300 ± 25%	100	0.080	2000
GBD201209PGH331N	330 ± 25%	100	0.080	2000
GBD201209PGH401N	400 ± 25%	100	0.100	2000
GBD201209PGH501N	500 ± 25%	100	0.100	2000
GBD201209PGH601N	600 ± 25%	100	0.100	2000
GBD201209PGH102N	1000 ± 25%	100	0.120	1500

Product Series Code	**GBD**	Brand	GOTREND
File Version	GBD-V4R5	Editor	Teddy
Established Date	2009.07.24	Description	Multilayer Ferrite Chip Bead
Latest Edit Date	2013.02.23		

GBG160808GZA331N



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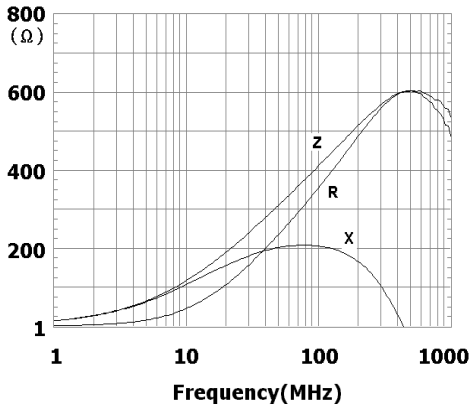

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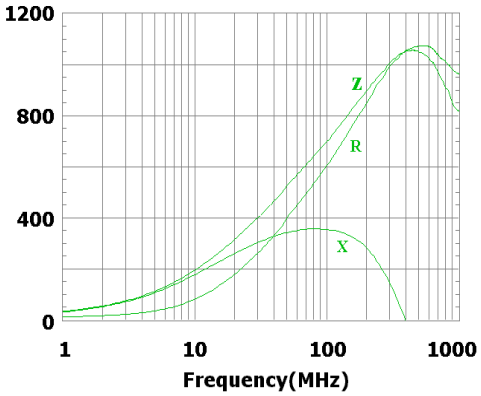

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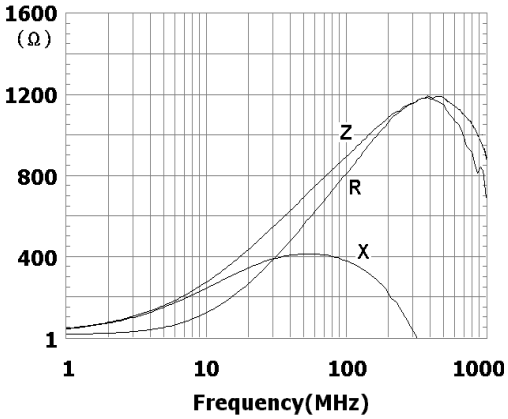


Product Series Code	**GBL**	Brand	GOTREND
File Version	GBL-V2R8	Editor	Teddy
Established Date	1997.09.28	Description	Multilayer Ferrite Chip Ind
Latest Edit Date	2013.02.23		

Features & Application:

* Bead inductor for power energy storage or noise suppressor.

* Fit for power line & signal line circuit

* To help you go pass the CE/FCC standard.

* Mobil Device / Handheld Device / LowProfile Device / Panel...

Product Structure

SMD | DIP | Shield | Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

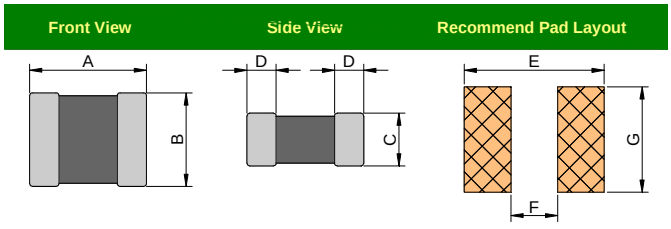
Part No Example:

GBL 321611 P - 2R7 K

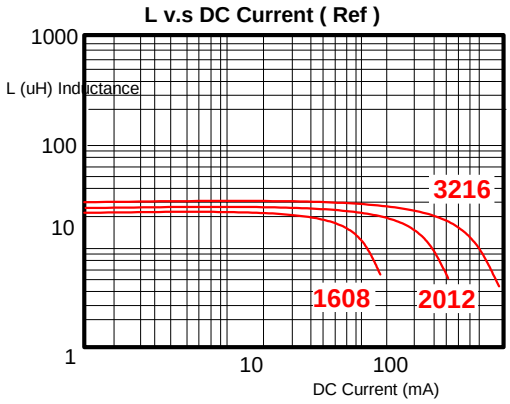
1 2 3 4 5

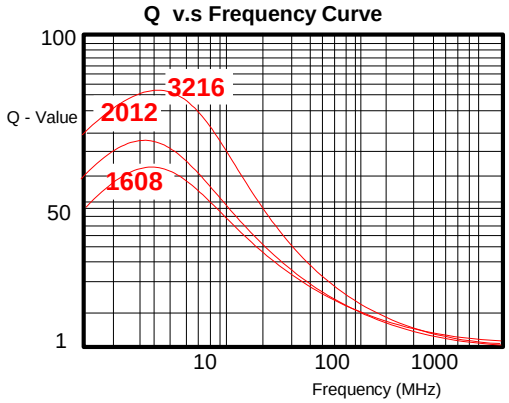
1. GBL : GOTREND BRAND & PRODUCT TYPE
2. 321611 : Dimension - Length 3.2mm X Width 1.6mmX T1.1mm
3. [P] : Pb free < 1000ppm
4. 2R7 : [L] Value - Inductance 2R7= 2.7uH
5. [K] : Tolerance Code - S = +/- 0.3 nH, J = 5%, K = 10% , M = 20%

DIMENSION : [mm]



TYPE	A	B	C	D	E	F	G
100505	1.00+/-0.15	0.50+/-0.15	0.50+/-0.15	0.25+/-0.15	1.10 ref.	0.40 ref.	0.60 ref.
160808	1.60+/-0.15	0.80+/-0.15	0.80+/-0.15	0.40+/-0.20	1.80 ref.	0.60 ref.	1.00 ref.
201209	2.00+/-0.20	1.25+/-0.20	0.90+/-0.20	0.50+/-0.30	2.40 ref.	0.80 ref.	1.45 ref.
201212	2.00+/-0.20	1.25+/-0.20	1.25+/-0.20	0.50+/-0.30	2.40 ref.	0.80 ref.	1.45 ref.
321611	3.20+/-0.20	1.60+/-0.20	1.10+/-0.20	0.50+/-0.30	3.40 ref.	2.00 ref.	1.80 ref.





Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15ºC
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5ºC
Relative Humidity:75+/-10%

Size Code & Package Quantity:

JIS CODE	EIA CODE	PCS / REEL	REEL / BOX
1005	0402	10000	5
1608	0603	4000	5
2012	0805	4000	5
3216	1206	3000	5

Product Series Code	**GBL**	Brand	GOTREND
File Version	GBL-V2R8	Editor	Teddy
Established Date	1997.09.28	Description	Multilayer Ferrite Chip Ind
Latest Edit Date	2013.02.23		

Operating & Storage Condition:

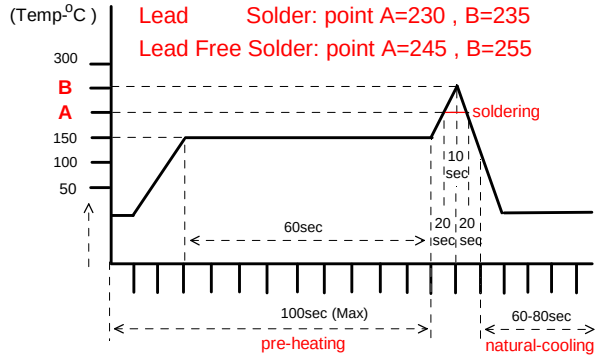
OPERATING TEMP:-40~+85°C

STORAGE TEMP:-40~+85°C
STORAGE LIFE TIME: 12 MONTH @25°C , RH 65%

Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260° C

Part No.	Inductance (uH)	Q (min)	L&Q Test Freq. (MHz)	S.R.F (MHz) (min)	DCR (ohm) (max)	IDC (mA) (max)
GBL100505P-10N ☐	0.010 ± 20%	8	100	300	0.42	50
GBL100505P-12N ☐	0.012 ± 20%	8	100	300	0.47	50
GBL100505P-47N ☐	0.047 ± 20%	10	50	220	0.45	50
GBL100505P-68N ☐	0.068 ± 20%	10	50	210	0.45	50
GBL100505P-82N ☐	0.082 ± 20%	10	50	200	0.45	50
GBL100505P-R10 ☐	0.10 ± 20%	15	25	200	0.80	50
GBL100505P-R12 ☐	0.12 ± 20%	15	25	165	0.80	25
GBL100505P-R15 ☐	0.15 ± 20%	15	25	140	0.90	25
GBL100505P-R18 ☐	0.18 ± 20%	15	25	120	0.90	25
GBL100505P-R22 ☐	0.22 ± 20%	15	25	110	1.20	25
GBL100505P-R27 ☐	0.27 ± 20%	15	25	95	1.20	25
GBL100505P-R33 ☐	0.33 ± 20%	15	25	230	1.50	25
GBL100505P-R39 ☐	0.39 ± 20%	25	10	210	0.41	20
GBL100505P-R47 ☐	0.47 ± 20%	20	10	190	0.65	10
GBL100505P-R56 ☐	0.56 ± 20%	20	10	170	0.70	10
GBL100505P-R68 ☐	0.68 ± 20%	20	10	150	0.80	10
GBL100505P-R82 ☐	0.82 ± 20%	20	10	130	0.90	10
GBL100505P-1R0 ☐	1.00 ± 20%	20	10	120	1.50	15
GBL100505P-1R2 ☐	1.20 ± 20%	20	10	110	1.60	15
GBL100505P-1R5 ☐	1.50 ± 20%	20	10	100	1.20	10
GBL100505P-1R8 ☐	1.80 ± 20%	20	10	90	1.30	10
GBL100505P-2R2 ☐	2.20 ± 20%	20	10	80	1.40	10

* Tolerance Code: ☐ J=± 5%, K=± 10%, M=± 20% , N=± 25%

Product Series Code	**GBL**	Brand	GOTREND
File Version	GBL-V2R8	Editor	Teddy
Established Date	1997.09.28	Description	Multilayer Ferrite Chip Ind
Latest Edit Date	2013.02.23		

Part No.	Inductance (uH)	Q (min)	L&Q Test Freq. (MHz)	S.R.F (MHz) (min)	DCR (ohm) (max)	IDC (mA) (max)
GBL160808P-47N ☐	0.047 ± 20%	20	50	260	0.30	50
GBL160808P-68N ☐	0.068 ± 20%	20	50	250	0.30	50
GBL160808P-82N ☐	0.082 ± 20%	20	50	245	0.30	50
GBL160808P-R10 ☐	0.10 ± 20% or 10%	30	25	240	0.50	50
GBL160808P-R12 ☐	0.12 ± 20% or 10%	30	25	205	0.50	50
GBL160808P-R15 ☐	0.15 ± 20% or 10%	30	25	180	0.60	50
GBL160808P-R18 ☐	0.18 ± 20% or 10%	30	25	165	0.60	50
GBL160808P-R22 ☐	0.22 ± 20% or 10%	30	25	150	0.80	50
GBL160808P-R27 ☐	0.27 ± 20% or 10%	30	25	136	0.80	50
GBL160808P-R33 ☐	0.33 ± 20% or 10%	30	25	125	0.85	35
GBL160808P-R39 ☐	0.39 ± 20% or 10%	30	25	110	1.00	35
GBL160808P-R47 ☐	0.47 ± 20% or 10%	30	25	105	1.35	35
GBL160808P-R56 ☐	0.56 ± 20% or 10%	30	25	95	1.55	35
GBL160808P-R68 ☐	0.68 ± 20% or 10%	30	25	85	1.70	35
GBL160808P-R82 ☐	0.82 ± 20% or 10%	30	25	75	2.10	35
GBL160808P-1R0 ☐	1.00 ± 20% or 10%	35	10	65	0.60	25
GBL160808P-1R2 ☐	1.20 ± 20% or 10%	35	10	60	0.80	25
GBL160808P-1R5 ☐	1.50 ± 20% or 10%	35	10	55	0.80	25
GBL160808P-1R8 ☐	1.80 ± 20% or 10%	35	10	50	0.95	25
GBL160808P-2R2 ☐	2.20 ± 20% or 10%	35	10	45	1.15	15
GBL160808P-2R7 ☐	2.70 ± 20% or 10%	35	10	40	1.35	15
GBL160808P-3R0 ☐	3.00 ± 20% or 10%	35	10	40	1.55	15
GBL160808P-3R3 ☐	3.30 ± 20% or 10%	35	10	38	1.55	15
GBL160808P-3R9 ☐	3.90 ± 20% or 10%	35	10	36	1.70	15
GBL160808P-4R7 ☐	4.70 ± 20% or 10%	35	10	33	2.10	15
GBL160808P-5R6 ☐	5.60 ± 20% or 10%	35	4	22	1.55	5
GBL160808P-6R8 ☐	6.80 ± 20% or 10%	35	4	20	1.70	5
GBL160808P-8R2 ☐	8.20 ± 20% or 10%	30	4	18	2.10	5
GBL160808P-100 ☐	10.00 ± 20% or 10%	30	2	17	2.55	3
GBL160808P-120 ☐	12.00 ± 20% or 10%	30	1	15	2.75	3
GBL160808P-150 ☐	15.00 ± 20% or 10%	20	1	14	2.85	1
GBL160808P-180 ☐	18.00 ± 20% or 10%	20	1	13	1.80	1

* Tolerance Code: ☐ J=± 5%, K=± 10%, M=± 20% , N=± 25%

Product Series Code	**GBL**	Brand	GOTREND
File Version	GBL-V2R8	Editor	Teddy
Established Date	1997.09.28	Description	Multilayer Ferrite Chip Ind
Latest Edit Date	2013.02.23		

Part No.	Inductance (uH)	Q (min)	L&Q Test Freq. (MHz)	S.R.F (MHz) (min)	DCR (ohm) (max)	IDC (mA) (max)
GBL201209P-47N ☐	0.047 ± 20%	25	50	320	0.20	300
GBL201209P-68N ☐	0.068 ± 20%	25	50	280	0.20	300
GBL201209P-82N ☐	0.082 ± 20%	25	50	255	0.20	300
GBL201209P-R10 ☐	0.10 ± 20% or 10%	30	25	235	0.30	250
GBL201209P-R12 ☐	0.12 ± 20% or 10%	30	25	220	0.30	250
GBL201209P-R15 ☐	0.15 ± 20% or 10%	30	25	200	0.40	250
GBL201209P-R18 ☐	0.18 ± 20% or 10%	30	25	185	0.40	250
GBL201209P-R22 ☐	0.22 ± 20% or 10%	30	25	170	0.50	250
GBL201209P-R27 ☐	0.27 ± 20% or 10%	30	25	150	0.50	250
GBL201209P-R33 ☐	0.33 ± 20% or 10%	30	25	145	0.55	250
GBL201209P-R39 ☐	0.39 ± 20% or 10%	30	25	135	0.65	250
GBL201209P-R47 ☐	0.47 ± 20% or 10%	30	25	125	0.65	250
GBL201209P-R56 ☐	0.56 ± 20% or 10%	30	25	115	0.75	150
GBL201209P-R68 ☐	0.68 ± 20% or 10%	30	25	105	0.80	150
GBL201209P-R82 ☐	0.82 ± 20% or 10%	30	25	100	1.00	150
GBL201209P-1R0 ☐	1.00 ± 20% or 10%	45	10	75	0.45	50
GBL201209P-1R2 ☐	1.20 ± 20% or 10%	45	10	65	0.50	50
GBL201209P-1R5 ☐	1.50 ± 20% or 10%	45	10	60	0.50	50
GBL201209P-1R8 ☐	1.80 ± 20% or 10%	45	10	55	0.60	50
GBL201209P-2R2 ☐	2.20 ± 20% or 10%	45	10	50	0.65	30
GBL201209P-4R7 ☐	4.70 ± 20% or 10%	45	10	35	1.00	30
GBL201212P-2R7 ☐	2.70 ± 20% or 10%	45	10	45	0.75	30
GBL201212P-3R3 ☐	3.30 ± 20% or 10%	45	10	41	0.80	30
GBL201212P-3R9 ☐	3.90 ± 20% or 10%	45	10	38	0.90	30
GBL201212P-4R7 ☐	4.70 ± 20% or 10%	45	10	35	1.00	30
GBL201212P-5R6 ☐	5.60 ± 20% or 10%	45	4	32	1.00	15
GBL201212P-6R8 ☐	6.80 ± 20% or 10%	45	4	29	1.00	15
GBL201212P-8R2 ☐	8.20 ± 20% or 10%	45	4	26	1.10	15
GBL201212P-100 ☐	10.00 ± 20% or 10%	45	2	24	1.15	15
GBL201212P-120 ☐	12.00 ± 20% or 10%	45	2	22	1.25	15
GBL201212P-150 ☐	15.00 ± 20% or 10%	30	1	19	0.80	5
GBL201212P-180 ☐	18.00 ± 20% or 10%	30	1	18	0.90	5
GBL201212P-220 ☐	22.00 ± 20% or 10%	30	1	16	1.10	5
GBL201212P-270 ☐	27.00 ± 20% or 10%	30	1	14	1.15	5
GBL201212P-330 ☐	33.00 ± 20% or 10%	30	0.4	13	1.25	5

* Tolerance Code: ☐ J=± 5%, K=± 10%, M=± 20% , N=± 25%

Product Series Code	**GBL**	Brand	GOTREND
File Version	GBL-V2R8	Editor	Teddy
Established Date	1997.09.28	Description	Multilayer Ferrite Chip Ind
Latest Edit Date	2013.02.23		

Part No.	Inductance (uH)	Q (min)	L&Q Test Freq. (MHz)	S.R.F (MHz) (min)	DCR (ohm) (max)	IDC (mA) (max)
GBL321611P-47N ☐	0.047 ± 20%	25	50	320	0.15	300
GBL321611P-68N ☐	0.068 ± 20%	25	50	280	0.25	300
GBL321611P-82N ☐	0.082 ± 20%	25	50	250	0.25	300
GBL321611P-R10 ☐	0.10 ± 20% or 10%	30	25	235	0.25	250
GBL321611P-R12 ☐	0.12 ± 20% or 10%	30	25	220	0.30	250
GBL321611P-R15 ☐	0.15 ± 20% or 10%	30	25	200	0.30	250
GBL321611P-R18 ☐	0.18 ± 20% or 10%	30	25	185	0.40	250
GBL321611P-R22 ☐	0.22 ± 20% or 10%	30	25	170	0.40	250
GBL321611P-R27 ☐	0.27 ± 20% or 10%	30	25	150	0.50	250
GBL321611P-R33 ☐	0.33 ± 20% or 10%	30	25	145	0.60	250
GBL321611P-R39 ☐	0.39 ± 20% or 10%	30	25	135	0.60	200
GBL321611P-R47 ☐	0.47 ± 20% or 10%	30	25	125	0.60	200
GBL321611P-R56 ☐	0.56 ± 20% or 10%	30	25	115	0.70	150
GBL321611P-R68 ☐	0.68 ± 20% or 10%	30	25	105	0.80	150
GBL321611P-R82 ☐	0.82 ± 20% or 10%	30	25	100	0.90	150
GBL321611P-1R0 ☐	1.00 ± 20% or 10%	45	10	75	0.40	100
GBL321611P-1R2 ☐	1.20 ± 20% or 10%	45	10	65	0.50	100
GBL321611P-1R5 ☐	1.50 ± 20% or 10%	45	10	60	0.50	80
GBL321611P-1R8 ☐	1.80 ± 20% or 10%	45	10	55	0.50	70
GBL321611P-2R2 ☐	2.20 ± 20% or 10%	45	10	50	0.60	60
GBL321611P-2R7 ☐	2.70 ± 20% or 10%	45	10	45	0.60	60
GBL321611P-3R3 ☐	3.30 ± 20% or 10%	45	10	41	0.70	60
GBL321611P-3R9 ☐	3.90 ± 20% or 10%	45	10	38	0.80	50
GBL321611P-4R7 ☐	4.70 ± 20% or 10%	45	10	35	0.90	50
GBL321611P-5R6 ☐	5.60 ± 20% or 10%	45	4	32	0.70	25
GBL321611P-6R8 ☐	6.80 ± 20% or 10%	45	4	29	0.80	25
GBL321611P-8R2 ☐	8.20 ± 20% or 10%	45	4	26	0.90	25
GBL321611P-100 ☐	10.00 ± 20% or 10%	45	2	24	1.00	25
GBL321611P-120 ☐	12.00 ± 20% or 10%	45	2	22	1.05	15
GBL321611P-150 ☐	15.00 ± 20% or 10%	35	1	19	0.70	5
GBL321611P-180 ☐	18.00 ± 20% or 10%	35	1	18	0.75	5
GBL321611P-220 ☐	22.00 ± 20% or 10%	35	1	16	0.90	5
GBL321611P-270 ☐	27.00 ± 20% or 10%	35	1	14	0.95	5
GBL321611P-330 ☐	33.00 ± 20% or 10%	35	0.4	13	1.05	5
GBL321611P-390 ☐	39.00 ± 20% or 10%	40	2	11	3.00	5
GBL321611P-470 ☐	47.00 ± 20% or 10%	40	2	10	3.40	5

* Tolerance Code: ☐ J=± 5%, K=± 10%, M=± 20% , N=± 25%

Product Series Code	**GBLH**	Brand	GOTREND
File Version	GBLH-V1R7	Editor	Teddy
Established Date	2011.04.22	Description	High Current Multilayer Ferrite Chip Inductor
Latest Edit Date	2013.02.23		

Features & Application:

* Bead inductor for power energy storage or noise suppressor.

* Fit for power line & signal line circuit

* To help you go pass the CE/FCC standard.

* Mobil Device / Handheld Device / LowProfile Device / Panel...

Part No Example:

GBLH 160808 P - 4R7 M

1 2 3 4 5

1. GBLH : GOTREND BRAND & PRODUCT TYPE
2. 160808 : Dimension - L 1.6 mm X W 0.8 mm X T 0.8 mm
3. P : Pb free < 1000ppm
4. 4R7 : [L] Value - Inductance 4R7 = 4.7 uH
5. M : Tolerance Code - M = 20%

Product Structure

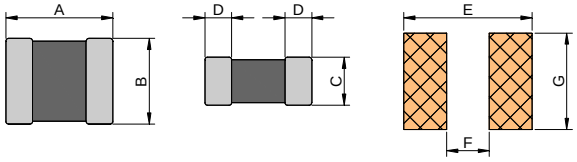
SMD DIP Shield Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚PBDE
<1000ppm	ND	ND	ND	ND	ND

DIMENSION : [mm]

Front View | Side View | Recommend Pad Layout



TYPE	A	B	C	D	E	F	G
160808	1.60+/-0.20	0.80+/-0.20	0.80+/-0.10	0.30+/-0.20	2.00 ref.	0.90 ref.	1.00 ref.
201209	2.00+/-0.20	1.25+/-0.20	0.90+/-0.10	0.50+/-0.20	2.40 ref.	0.80 ref.	1.45 ref.
201609	2.00+/-0.15	1.60+/-0.15	0.90+/-0.10	0.50+/-0.20	2.40 ref.	0.80 ref.	1.80 ref.
252010	2.50+/-0.20	2.00+/-0.20	0.90+/-0.10	0.60+/-0.20	2.90 ref.	1.10 ref.	2.20 ref.

Operating & Storage Condition:

OPERATING TEMP:-55~+125°C
STORAGE TEMP:-10~+40°C
STORAGE LIFE TIME: 12 MONTH @25°C , RH 65%

SCHEMATIC :

Attention & Caution:

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

Size Code & Package Quantity:

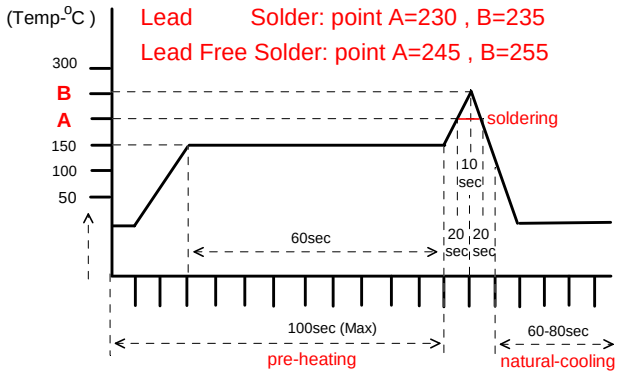
JIS CODE	EIA CODE	PCS / REEL	REEL / BOX
160808	0603	4,000	5
201209	0805	4,000	5
201609	0806	3,000	5
252010	1008	3,000	5

Test Equipment :

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions:
Ambient Temp:20+/-15°C
Relative Humidity:50+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:50+/-20%

Recommand Reflow Curve (TIME:Second)



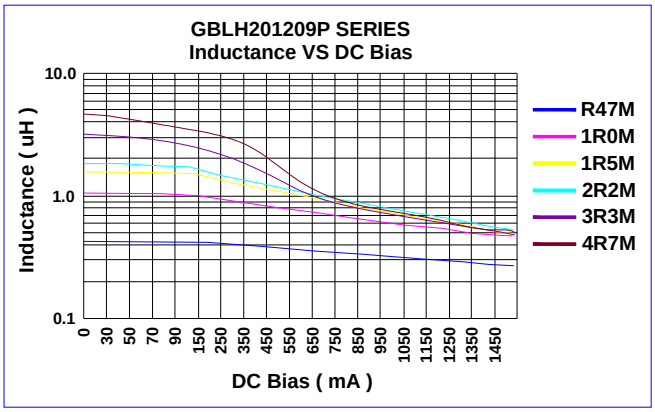
Notice: Iron Soldering: 3 Seconds Max. @260° C

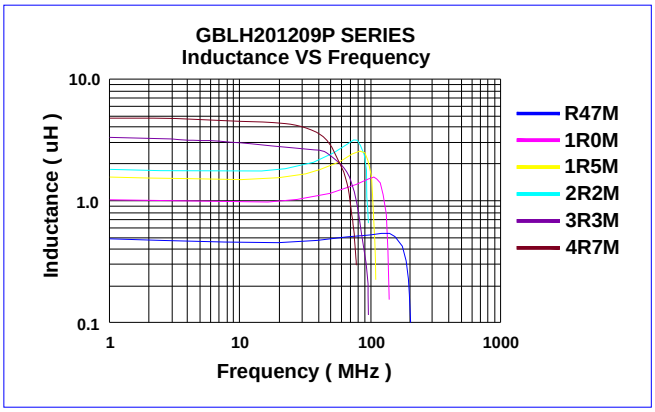
Product Series Code	**GBLH**	Brand	GOTREND
File Version	GBLH-V1R7	Editor	Teddy
Established Date	2011.04.22	Description	High Current Multilayer Ferrite Chip Inductor
Latest Edit Date	2013.02.23		

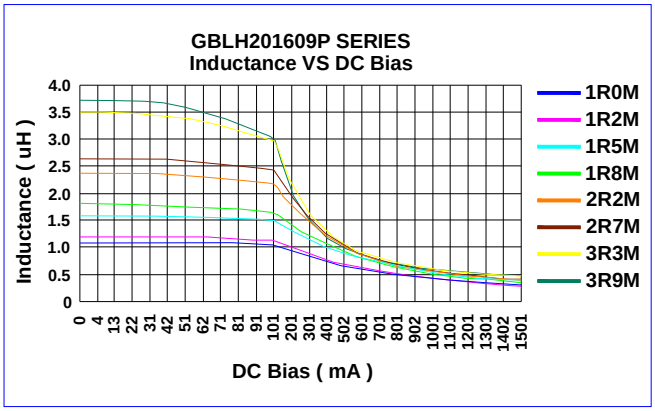
Part No.	Inductance (uH)	SRF (MHz) (min)	DCR (ohm)	Rated current (mA) (max)
GBLH160808P-R22M	0.22 ± 20%	150	0.8 MAX	50
GBLH160808P-4R7M	4.70 ± 20%	35	2.10 MAX	110
GBLH160808P-100M	10.0 ± 20%	17	1.85 MAX	60
GBLH201209P-R47M	0.47 ± 20%	100	0.10 +/- 25%	1100
GBLH201209P-1R0M	1.00 ± 20%	90	0.16 +/- 25%	800
GBLH201209P-1R5M	1.50 ± 20%	70	0.22 +/- 25%	700
GBLH201209P-2R2M	2.20 ± 20%	50	0.25 +/- 25%	600
GBLH201209P-3R3M	3.30 ± 20%	40	0.22 +/- 25%	500
GBLH201209P-4R7M	4.70 ± 20%	30	0.30 +/- 25%	400
GBLH201609P-1R0M	1.00 ± 20%	60	0.077 ~ 0.143	1700
GBLH201609P-1R2M	1.20 ± 20%	60	0.077 ~ 0.143	1700
GBLH201609P-1R5M	1.50 ± 20%	50	0.098 ~ 0.182	1500
GBLH201609P-1R8M	1.80 ± 20%	50	0.098 ~ 0.182	1500
GBLH201609P-2R2M	2.20 ± 20%	40	0.126 ~ 0.234	1300
GBLH201609P-2R7M	2.70 ± 20%	40	0.126 ~ 0.234	1300
GBLH201609P-3R3M	3.30 ± 20%	30	0.161 ~ 0.299	1100
GBLH201609P-3R9M	3.90 ± 20%	30	0.161 ~ 0.299	1100
GBLH201609P-4R7M	4.70 ± 20%	30	0.161 ~ 0.299	900
GBLH252010P-R47M	0.47 ± 20%	100	0.07 +/- 25%	1800
GBLH252010P-1R0M	1.00 ± 20%	60	0.11 +/- 25%	1600
GBLH252010P-1R5M	1.50 ± 20%	50	0.13 +/- 25%	1500
GBLH252010P-2R2M	2.20 ± 20%	40	0.16 +/- 25%	1300
GBLH252010P-3R3M	3.30 ± 20%	30	0.17 +/- 25%	1200
GBLH252010P-4R7M	4.70 ± 20%	25	0.20 +/- 25%	1100

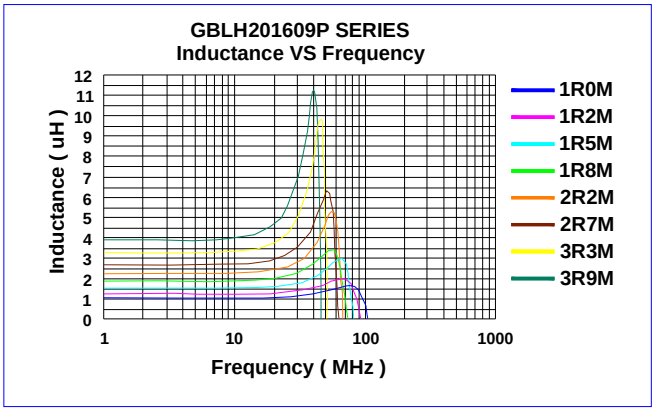
* Inductance test freq. : @ 1MHz / 250mV
* The maximum rated current : The DC current value having temperature increased 40 deg.C after thru DC current 2 hours at ambient temperature.
  Regarding to the inductance variability of rated current , please refer to Inductance Vs. DC superposition characteristics.

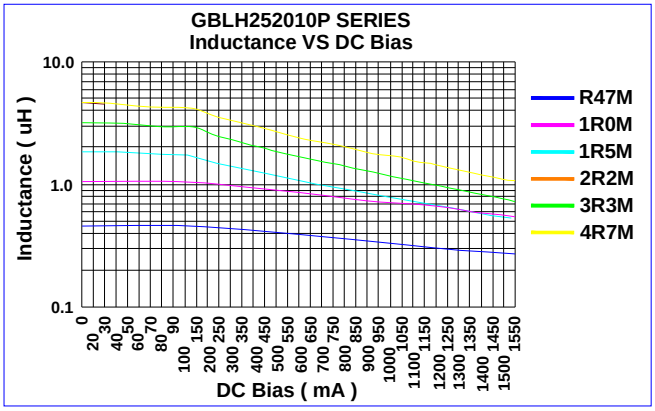
Product Series Code	**GBLH**	Brand	GOTREND
File Version	GBLH-V1R7	Editor	Teddy
Established Date	2011.04.22	Description	High Current Multilayer Ferrite Chip Inductor
Latest Edit Date	2013.02.23		

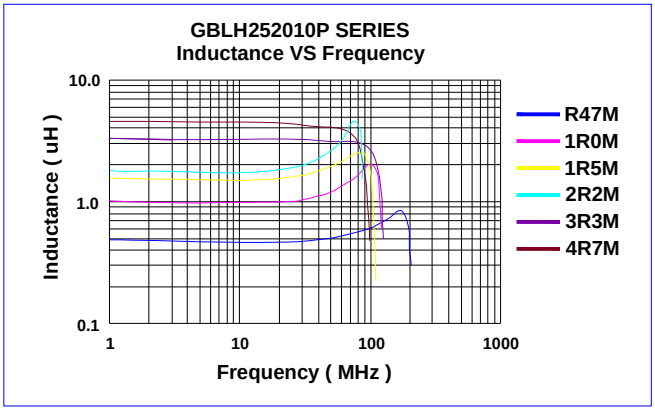


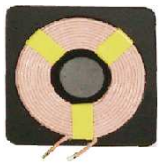












Product Series Code	**GW**	Brand	GOTREND
File Version	GW-V1R4	Editor	Teddy
Established Date	2012.01.06	Description	Wireless Charging Coil
	2013.02.23		

Features & Application :

* Wireless charging coil
* High permeability shielding for wireless chargingWireless Charging Coil
* Blocks charging flux from sensitive components or batteries
* High saturation powered iron - not affected by permanent locating magnets
* Durable construction
* Compliant to RoHS Directive 2002 / 95 / CE

Product Structure

SMD DIP Shield Unshield

2005 RoHS Compliant - SGS Certified Result

鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯醚 PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example:

GW 483201 P □ - 032 B 15 Y TN - □

1 2 3 4 5 6 7 8 9 10

1. Product Code : GW
2. Size Code : 483201 = 48 X 32 X 1.0
3. P = Pb Free < 1000ppm
4. [R] : Rx [T] Tx
5. Wire Size : 0.32 = 0.32 mm ..... etc.
6. Wire Count : A = Single , B = 2 Wire , C = 3 Wire ..... etc.
7. Wire Turns (Ts) : 15 = 15.0 Ts
8. Wire Color : Y = Copper Yellow , R = Copper Red
9. [TN] [TM] [TS] : Material Code
10. [A ~ Z] : For Customer Special Design.

Test Equipment :

* HP4284A , HP42841A - L , IDC , Q , RDC

Standard Atmospheric Conditions :
Ambient Temp:20+/-15°C
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5°C
Relative Humidity:75+/-10%

Operating & Storage Condition :

OPERATING TEMP : -25 ~ +85°C

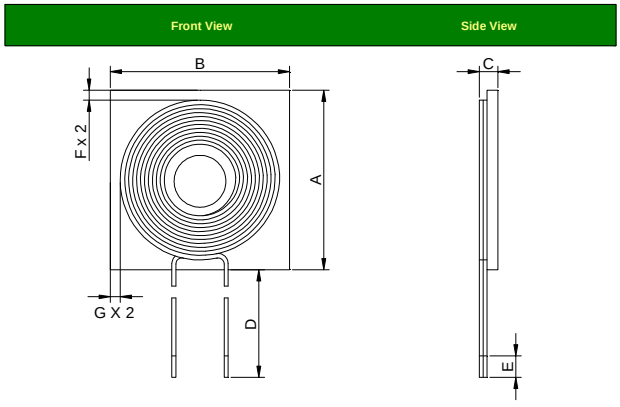
STORAGE TEMP : -40 ~ +85°C
STORAGE LIFE TIME : 12 MONTH @25°C , RH 40~65%

Attention & Caution :

Please avoid following matters:
* Splashing water or salt water
* Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
* Vibrations or shocks which exceed the specified condition
* Dew condenses
* Please be careful for the stress to this product by board flexure or something after the mounting.

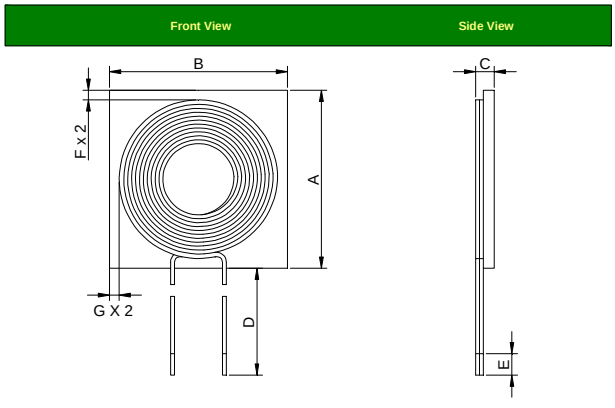
Dimension :

GW505006PT-11A20RTNS :

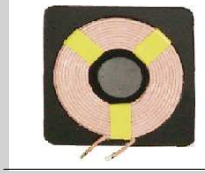


Size	A[+/-0.5]	B[+/-0.5]	C[Max.]	D[+/- 5.0]	E[+/-1.0]	F[Min.]	G[Min.]
505006	50.0	50.0	5.2+/-0.3	30.0	6.0	2.0	2.0

GW505006PT-11A20RTN :

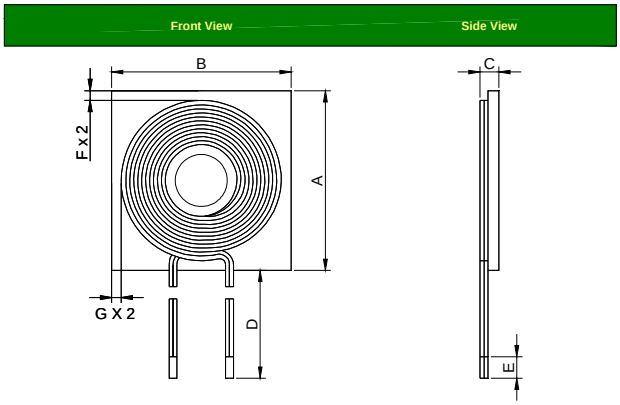


Size	A[+/-0.5]	B[+/-0.5]	C[Max.]	D[+/- 5.0]	E[+/-1.0]	F[Min.]	G[Min.]
505006	50.0	50.0	5.2+/-0.3	30.0	6.0	2.0	2.0



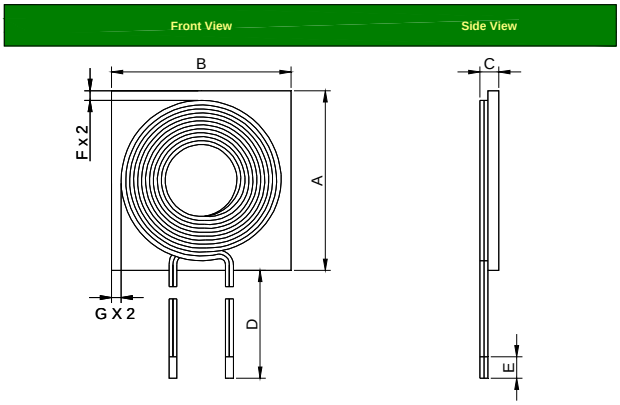
Product Series Code	**GW**	Brand	GOTREND
File Version	GW-V1R4	Editor	Teddy
Established Date	2012.01.06	Description	Wireless Charging Coil
Latest Edit Date	2013.02.23		

GW505006PT-08B10RTNS :



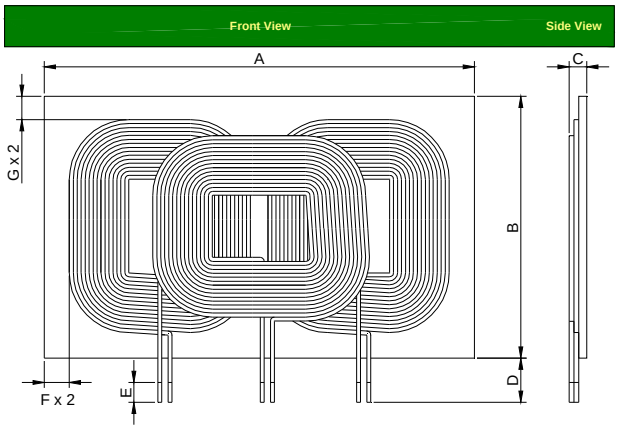
Size	A[+/-0.5]	B[+/-0.5]	C[Max.]	D[+/- 5.0]	E[+/-1.0]	F[Min.]	G[Min.]
505006	50.0	50.0	6.0	50.0	10.0	2.0	2.0

GW505006PT-08B10RTN :



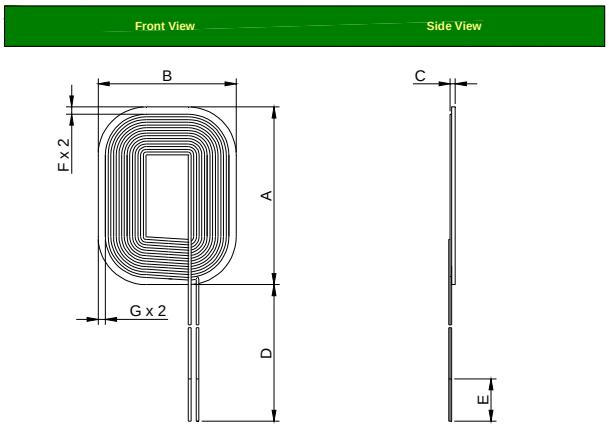
Size	A[+/-0.5]	B[+/-0.5]	C[Max.]	D[+/- 5.0]	E[+/-1.0]	F[Min.]	G[Min.]
505006	50.0	50.0	6.0	50.0	10.0	2.0	2.0

GW1065705PT-12C12RTN / S :



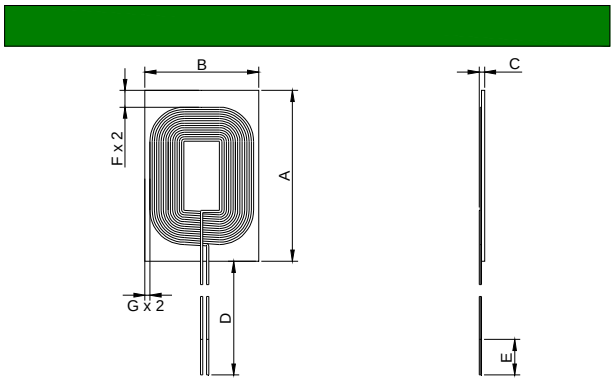
Size	A[+/-0.5]	B[+/-0.5]	C[Max.]	D[+/-3.0]	E[+/-1.0]	F[Min.]	G[Min.]
1065705	106.5	57.5	5.5	20.0	5.0	5.0	2.0

GW574803PT-12A12RTN :



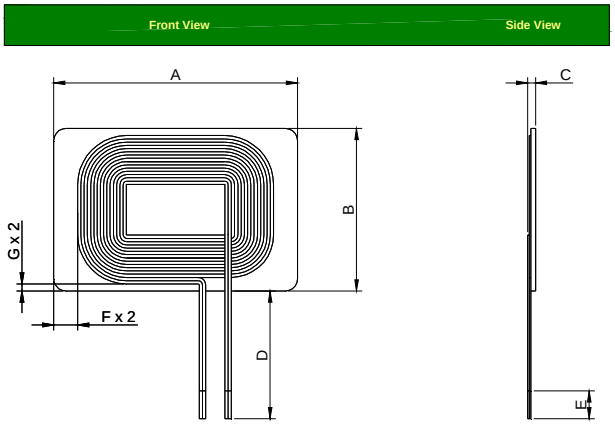
Size	A[+/-1.0]	B[+/-0.5]	C[Max.]	D[+/-3.0]	E[+/-1.0]	F[+/-0.5]	G[+/-0.5]
574803	57.0	48.5	3.3	48.0	3.0	2.0	1.65

GW483201PR-032B15YTS :

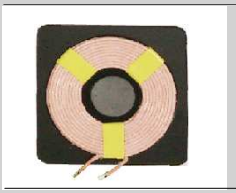


Size	A[+/-0.5]	B[+/-0.5]	C[Max.]	D[+/- 5.0]	E[+/-1.0]	F[Min.]	G[Min.]
483201	48.0	32.0	1.3	50.0	10.0	2.5	1.2

GW443101PR-03B13YTS :



Size	A[+/-0.5]	B[+/-0.5]	C[Max.]	D[+/-3.0]	E[+/-1.0]	F[Min.]	G[Min.]
443101	44.0	31.0	1.4	22.0	5.0	2.5	1.0



Product Series Code	**GW**	Brand	GOTREND
File Version	GW-V1R4	Editor	Teddy
Established Date	2012.01.06	Description	Wireless Charging Coil
Latest Edit Date	2013.02.23		

Electrical Characteristics :

GOTREND PN	WPC PN	Inductance (uH)	DCR (m Ohm)	Isat (A)	Irms (A)
Rx Type					
GW483201PR-032B15YTS	NA	13.0 +/- 8%	210.0 Typ. / 250.0 Max.	3.0 Max.	2.5 Max.
GW443110PR-03B13YTS	NA	9.95 +/- 0.5	150.0 Typ. / 180.0 Max.	1.0 Max.	2.8 Max.
Tx Type					
GW505006PT-11A20RTNS	A1	24.0 +/- 8%	71.0 Typ. / 75.0 Max.	30.0 Max.	5.0 Max.
GW505006PT-11A20RTN	A10	24.0 +/- 8%	71.0 Typ. / 75.0 Max.	30.0 Max.	5.0 Max.
GW505006PT-08B10RTNS	A5	6.30 +/- 10%	28.5 Typ. / 35.0 Max.	40.0 Max.	10.0 Max.
GW505006PT-08B10RTN	A11	6.30 +/- 10%	28.5 Typ. / 35.0 Max.	40.0 Max.	10.0 Max.
GW1065705PT-12C12RTN	A6	11.5 +/- 10%	60.0 +/- 20%	35.0 Max.	5.2 Max.
GW1065705PT-12C12RTS	A6	11.5 +/- 10%	60.0 +/- 20%	35.0 Max.	5.2 Max.
GW574803PT-12A12RTN	A6 Single	11.5 +/- 10%	60.0 +/- 20%	35.0 Max.	5.2 Max.

* Inductance Test Condition@100KHz,1.0Vrms, 25°C Ambient
* Isat : Base on L drop 10% max.
* Irms : Base on temp. rise up 40 deg.C max.
* A6 Electrical characteristics for each winding.

GOTREND Technology Co., Ltd.

http://www.gotrend.com.tw

台北總公司 / Taipei Headquarter

新北市中和區建一路186號H棟17樓(遠東世紀廣場)

17F., No.186, Jian 1st Rd., Building H, Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)

TEL:886-2-82271808 / FAX:886-2-82271908 / E-MAIL: service@gotrend.com.tw

台南業務部 / Tainan Sales Dept.

台南市永康區中華路703巷56號4F

4F., No.56, Ln. 703, Zhonghua Rd., Yongkang Dist., Tainan City 710, Taiwan (R.O.C.)

TEL: 886-6-3021697 / FAX: 886-2-82271908 / E-MAIL : service@gotrend.com.tw

深圳業務部 / Shenzhen Sales Dept.

廣東省深圳市福田區深南大道6007號安徽大廈2618室

Room 2618, Anhui Building, No.6007, Shennan Avenue, Futian District, Shenzhen, Guangdong, China.

TEL:86-755-81786550 / FAX:86-755-29006054 / E-MAIL: service@gotrend.com.tw

崑山業務部 / Kunshan Sales Dept.

江蘇省昆山市 / Kunshan City, Jiangsu Province, China. / Skype：GTX-GKS

TEL:886-2-82271808 / FAX:886-2-82271908 / E-MAIL: service@gotrend.com.tw

廣州特創廠 / GuangZhou TECTREND Factory

廣東省廣東市番禺區沙頭街道西麗工業區麗景路78號

No.78, Xili Industrial Zone Lijing Road, Shatou Sub-District, Guangdong Shifanyu Zone, Guangdong, China.

E-MAIL: service@gotrend.com.tw