

BEC Distribution introduce a New Ultra-small shielded power inductor range.





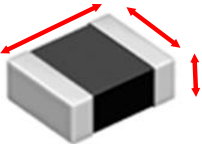
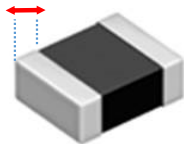
The new range is suitable for High current, low profile, miniature power inductors including automotive applications. This new range adds to BEC Distribution's normal business of supplying better pricing, stable quality and shorter delivery for **SMT Power Inductors, High Current Shielded Power Inductors & Chip inductors, Common Mode Choke, LAN Magnetics** for the electronics industry.

Please contact sales@bec.co.uk if you have projects requiring passive components, such as **Power Inductors, High Current Shielded Power Inductors, Chip Inductors, Common Mode Choke, Line Filter, Transformers** and **LAN Magnetics**. Or for more info please visit: www.bec.co.uk

Part Numbers					
Series	Inductance	Coilmaster	MURATA	Coiltronic-EATON	Taiyo Yuden
ML206010QP	0.24 μ H	ML201610QP-R24M-LF	DFE201610P-R24M		
	0.33 μ H	ML201610QP-R33M-LF	DFE201610P-R33M		
	0.47 μ H	ML201610QP-R47M-LF	DFE201610P-R47M		
	0.68 μ H	ML201610QP-R68M-LF	DFE201610P-R68M		
	1.0 μ H	ML201610QP-1R0M-LF	DFE201610P-1R0M		
	1.50 μ H	ML201610QP-1R5M-LF	DFE201610P-1R5M		
	2.20 μ H	ML201610QP-2R2M-LF	DFE201610P-2R2M		
ML252010QP	0.22 μ H	ML252010QP-R22M-LF	x		
	0.33 μ H	ML252010QP-R33M-LF	x		
	0.47 μ H	ML252010QP-R47M-LF	x		
	0.68 μ H	ML252010QP-R68M-LF	x		
	1.00 μ H	ML252010QP-1R0M-LF	1269AS-H-1R0M#		
	1.50 μ H	ML252010QP-1R5M-LF	x		
	2.20 μ H	ML252010QP-2R2M-LF	x		
	4.70 μ H	ML252010QP-4R7M-LF	x		
ML252012QP	0.47 μ H	ML252012QP-R47M-LF	x	MPI2512V1-R47-R	
	0.68 μ H	ML252012QP-R68M-LF	x	MPI2512V1-R68-R	x
	1.0 μ H	ML252012QP-1R0M-LF	x	MPI2512V1-1R0-R	CKP2520V1R0M-T
	1.50 μ H	ML252012QP-1R5M-LF	x	MPI2512V1-1R5-R	x
	2.20 μ H	ML252012QP-2R2M-LF	x	MPI2512V1-2R2-R	CKP2520V2R2M-T
	4.70 μ H	ML252012QP-4R7M-LF	x	MPI2512V1-4R7-R	CKP2520V4R7M-T
ML252012QS	0.47 μ H	ML252012QS-R47M-LF	DFE252012P-R47M=P2		
	1.00 μ H	ML252012QS-1R0M-LF	DFE252012P-1R0M=P2		
	2.20 μ H	ML252012QS-2R2M-LF	DFE252012P-2R2M=P2		

High Current Power Inductors - Cross reference

ML201610QP >> DFE201610P


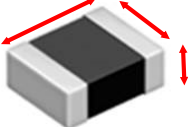
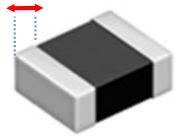
			
Coilmaster Part Number		MURATA Part Number	
Manufacturer Part Number			
Inductance	0.24 μ H	ML201610QP-R24M-LF	DFE201610P-R24M
	0.33 μ H	ML201610QP-R33M-LF	DFE201610P-R33M
	0.47 μ H	ML201610QP-R47M-LF	DFE201610P-R47M
	0.68 μ H	ML201610QP-R68M-LF	DFE201610P-R68M
	1.0 μ H	ML201610QP-1R0M-LF	DFE201610P-1R0M
	1.50 μ H	ML201610QP-1R5M-LF	DFE201610P-1R5M
	2.20 μ H	ML201610QP-2R2M-LF	DFE201610P-2R2M
Operating Temp range °C		-40 ~ 125	-40 ~ 85
Dimensions (mm)		Length = 2.0 \pm 0.2 Width = 1.6 \pm 0.2 Thickness = 0.9 \pm 0.1	Length = 2.0 \pm 0.2 Width = 1.6 \pm 0.2 Thickness = 1.0 max
E (mm)		0.2 ~ 0.8	0.5 \pm 0.3

Applications

- Handheld/mobile devices
- Smart phones
- Tablets/e-readers
- Media players
- GPS
- MP3 Players
- Wearable electronics
- Digital cameras

FEATURES (Coilmaster)

1. Magnetic shielding allows high-density mounting
2. Ultra-small shielded power inductor – only 1 mm high, 2.0x 1.6 mm footprint
3. Handles current up to 5.6 Amps
4. Excellent mounting strength by SMD chip making
5. Isat means that DC current will cause a 30% inductance reduction from initial value .
6. Irms means that DC current will cause coil temperature rising to 40°C whichever is smaller.
7. RoHS-compliant. 260°C compatible.
8. Operating Temperature Range : -40°C to +125°C




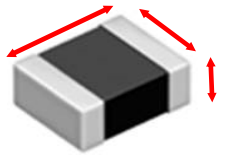
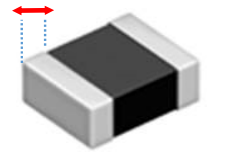
			<i>muRata</i>	EAT·N
Manufacturer Part Number		Coilmaster Part Number	MURATA Part Number	Coiltronic-EATON Part Number
Inductance	0.22 μH	ML252010QP-R22M-LF	NA	NA
	0.33 μH	ML252010QP-R33M-LF	NA	MPI2510V1-R33-R
	0.47 μH	ML252010QP-R47M-LF	1269AS-H-R47M	MPI2510V1-R47-R
	0.68 μH	ML252010QP-R68M-LF	NA	MPI2510V1-R68-R
	1.0 μH	ML252010QP-1R0M-LF	1269AS-H-1R0M	MPI2510V1-1R0-R
	1.50 μH	ML252010QP-1R5M-LF	1269AS-H-1R5M	MPI2510V1-1R5-R
	2.20 μH	ML252010QP-2R2M-LF	1269AS-H-2R2M	MPI2510V1-2R2-R
	4.70 μH	ML252010QP-4R7M-LF	1269AS-H-4R7M	MPI2510V1-4R7-R
Operating Temp range °C		-40 ~ 125	-40 ~ 85	-40 ~ 125
Dimensions (mm)		Length = 2.5 ± 0.2 Width = 2.0 ± 0.2 Thickness = 0.9 ± 0.1	Length = 2.5 ± 0.2 Width = 2.0 ± 0.2 Thickness = 1.0 max	Length = 2.5 ± 0.2 Width = 2.0 ± 0.2 Thickness = 1.0 max
E (mm)		0.6 ± 0.3	0.6 ± 0.3	0.6 ± 0.3

Applications

- Handheld/mobile devices
- Smart phones
- Tablets/e-readers
- Media players
- GPS
- MP3 Players
- Wearable electronics
- Digital cameras

FEATURES (Coilmaster)

1. Magnetic shielding allows high-density mounting
2. Ultra-small shielded power inductor – only 1 mm high, 2.5× 2 mm footprint
3. Handles current up to 7.2 Amps
4. Excellent mounting strength by SMD chip making
5. Isat means that DC current will cause a 30% inductance reduction from initial value .
6. Irms means that DC current will cause coil temperature rising to 40°C whichever is smaller.
7. RoHS-compliant. 260°C compatible.
8. Operating Temperature Range : -40°C to +125°C



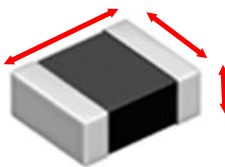
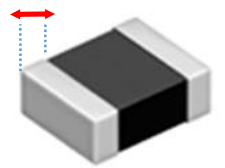
				
Manufacturer Part Number		Coilmaster Part Number	Coiltronic-EATON Part Number	Taiyo Yuden Part Number
	0.47 μ H	ML252012QP-R47M-LF	MPI2512V1-R47-R	
	0.68 μ H	ML252012QP-R68M-LF	MPI2512V1-R68-R	NA
	1.0 μ H	ML252012QP-1R0M-LF	MPI2512V1-1R0-R	CKP2520V1R0M-T
	1.50 μ H	ML252012QP-1R5M-LF	MPI2512V1-1R5-R	NA
	2.20 μ H	ML252012QP-2R2M-LF	MPI2512V1-2R2-R	CKP2520V2R2M-T
	4.70 μ H	ML252012QP-4R7M-LF	MPI2512V1-4R7-R	CKP2520V4R7M-T
Operating Temp range °C		-40 ~ 125	-40 ~ 85	-40 ~ 125
Dimensions (mm)		Length = 2.5 \pm 0.2 Width = 2.0 \pm 0.2 Thickness = 0.9 \pm 0.1	Length = 2.5 \pm 0.2 Width = 2.0 \pm 0.2 Thickness = 1.2 max	Length = 2.5 \pm 0.2 Width = 2.0 \pm 0.2 Thickness = 1.2 max
E (mm)		0.5 \pm 0.2	0.4 \pm 0.25	0.5 \pm 0.3

Applications

- DC/DC converter, DSC, DVC
- Handheld/mobile devices
- Smart phones
- Tablets/e-readers
- Media players
- GPS
- MP3 Players
- Wearable electronics
- Digital cameras

FEATURES (Coilmaster)

1. Magnetic shielding allows high-density mounting
2. Ultra-small shielded power inductor – only 1.2 mm high, 2.5x 2 mm footprint
3. Handles current up to 5.3 Amps
4. Excellent mounting strength by SMD chip making
5. Isat means that DC current will cause a 30% inductance reduction from initial value .
6. Irms means that DC current will cause coil temperature rising to 40°C whichever is smaller.
7. RoHS-compliant. 260°C compatible.
8. Operating Temperature Range : -40°C to +125°C

			
Manufacturer Part Number		Coilmaster Part Number	MURATA Part Number
	0.47 μ H	ML252012QS-R47M-LF	DFE252012P-R47M=P2
	1.00 μ H	ML252012QS-1R0M-LF	DFE252012P-1R0M=P2
	2.20 μ H	ML252012QS-2R2M-LF	DFE252012P-2R2M=P2
Operating Temp range °C		-40 ~ 125	-40 ~ 125
Dimensions (mm)		Length = 2.5 \pm 0.2 Width = 2.0 \pm 0.2 Thickness = 0.9 \pm 0.1	Length = 2.5 \pm 0.2 Width = 2.0 \pm 0.2 Thickness = 1.2 max
E (mm)		0.5 \pm 0.2	0.6 \pm 0.2

Applications

- DC/DC converter, DSC, DVC
- Handheld/mobile devices
- Smart phones
- Tablets/e-readers
- Media players
- GPS
- MP3 Players
- Wearable electronics
- Digital cameras

FEATURES (Coilmaster)

1. Magnetic shielding allows high-density mounting
2. Ultra-small shielded power inductor – only 1.2 mm high, 2.5x 2 mm footprint
3. Handles current up to 6.8 Amps
4. Excellent mounting strength by SMD chip making
5. Isat means that DC current will cause a 30% inductance reduction from initial value .
6. Irms means that DC current will cause coil temperature rising to 40°C whichever is smaller.
7. RoHS-compliant. 260°C compatible.
8. Operating Temperature Range : -40°C to +125°C

ML252012QS SERIES - High Current Power Inductors

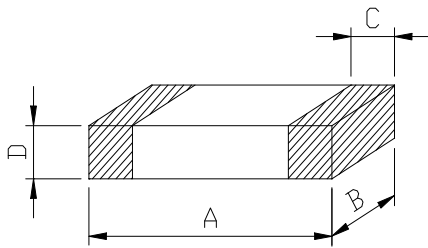


PART NUMBERING SYSTEM

ML	252012QS	—	1R0M	—	LF
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

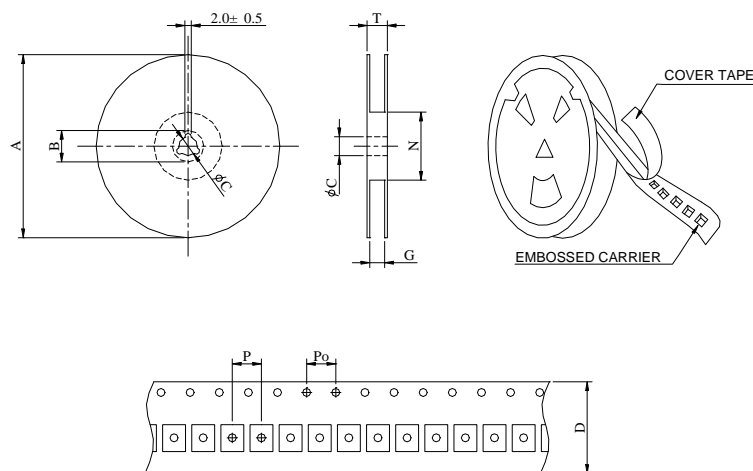
SHAPES AND DIMENSIONS

UNIT : mm



A= 2.5±0.3 B=2.0±0.3 C=0.6±0.3 D=1.2 Max.

PACKAGING SPECIFICATION



SERIES	STAYLE	Q'TY (PCS)	DIMENSIONS (m/m)								
			A	B±0.8	C±0.5	D	G ⁺	N ⁰	P	Po	T
ML252012QS	178	3,000	178	21	13	8	18	50	4	4	22.4



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ML252012QS SERIES – High Current Power Inductors



SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	DCR (m Ω) Max. (Typ.)	Isat(A) Max. (Typ.)	Irms(A) Max. (Typ.)	TEST FREQ. (MHz)
ML252012QS-R47M-LF	0.47 \pm 20%	22.0 (16)	6.2 (6.8)	4.9 (5.8)	1MHz/1V
ML252012QS-1R0M-LF	1.00 \pm 20%	44.0 (36)	4.3 (4.8)	3.3 (3.9)	1MHz/1V
ML252012QS-2R2M-LF	2.20 \pm 20%	89.0 (74)	3.2 (3.5)	2.2 (2.5)	1MHz/1V

FEATURES

1. **Magnetic shielding** allows high-density mounting
2. **Ultra-small shielded power inductor** – only **1.2 mm** high, **2.5× 2 mm** footprint
3. Handles **current up to 6.8 Amps**
4. Excellent mounting strength by SMD chip making
5. **Isat** means that DC current will cause a **30% inductance reduction** from initial value .
6. **Irms** means that DC current will cause **coil temperature rising to 40°C** whichever is smaller.
7. **RoHS-compliant**. 260°C compatible.
8. Operating Temperature Range : -40°C to +125°C

ML252012QP SERIES – High Current Power Inductors

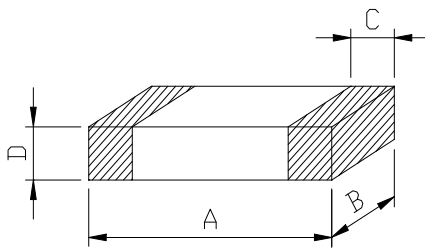


PART NUMBERING SYSTEM

<u>ML</u>	<u>252012QP</u>	—	<u>1R0M</u>	—	<u>LF</u>
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

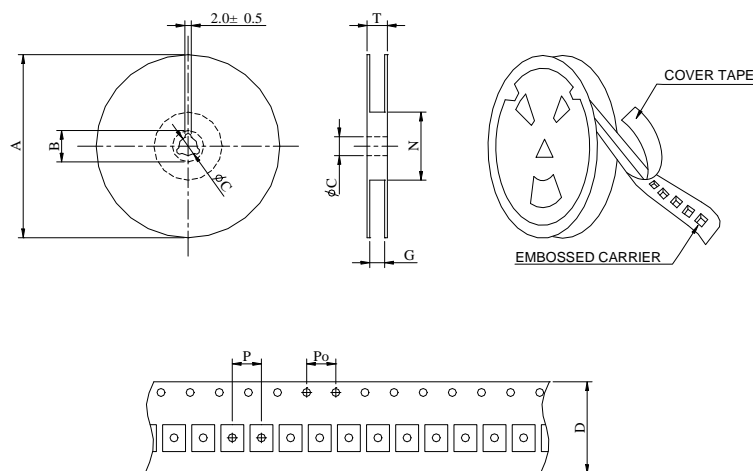
SHAPES AND DIMENSIONS

UNIT : mm



A= 2.5±0.3 B=2.0±0.3 C=0.6±0.3 D=1.2 Max.

PACKAGING SPECIFICATION



SERIES	STAYLE	Q'TY (PCS)	DIMENSIONS (m/m)								
			A	B±0.8	C±0.5	D	G ⁺	N ⁰	P	Po	T
ML252012QP	178	3,000	178	21	13	8	18	50	4	4	22.4



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Taoyuan City, Taiwan



ML252012QP SERIES – High Current Power Inductors



SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	DCR (m Ω) Max. (Typ.)	Isat(A) Max. (Typ.)	Irms(A) Max. (Typ.)	TEST FREQ. (MHz)
ML252012QP-R47M-LF	0.47 \pm 20%	25.0 (21)	4.95 (5.3)	4.18 (4.60)	1MHz/1V
ML252012QP-R68M-LF	0.68 \pm 20%	35.0 (29)	4.63 (5.0)	3.36 (3.70)	1MHz/1V
ML252012QP-1R0M-LF	1.00 \pm 20%	49.0 (41)	4.04 (4.4)	3.18 (3.50)	1MHz/1V
ML252012QP-1R5M-LF	1.50 \pm 20%	77.0 (64)	2.91 (3.2)	2.27 (2.50)	1MHz/1V
ML252012QP-2R2M-LF	2.20 \pm 20%	98.0 (85)	2.73 (3.0)	2.06 (2.27)	1MHz/1V
ML252012QP-4R7M-LF	4.70 \pm 20%	235.0 (196)	1.58 (1.9)	1.40 (1.61)	1MHz/1V

FEATURES

- Magnetic shielding** allows high-density mounting
- Ultra-small shielded power inductor** – only **1.2 mm** high, **2.5× 2 mm** footprint
- Handles **current up to 5.3 Amps**
- Excellent mounting strength by SMD chip making
- Isat** means that DC current will cause a **30% inductance reduction** from initial value .
- Irms** means that DC current will cause **coil temperature rising to 40°C** whichever is smaller.
- RoHS-compliant.** 260°C compatible.
- Operating Temperature Range : -40°C to +125°C

ML252010QP SERIES – High Current Power Inductors

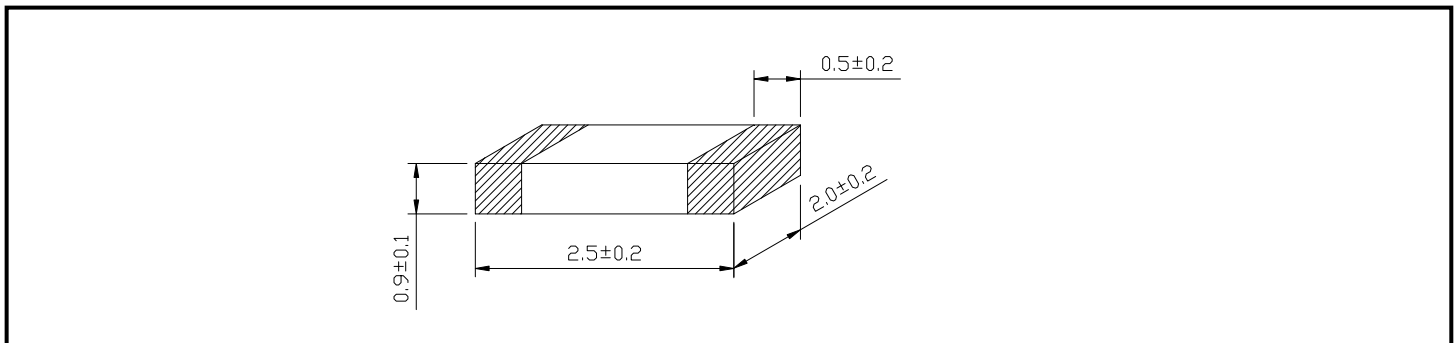


PART NUMBERING SYSTEM

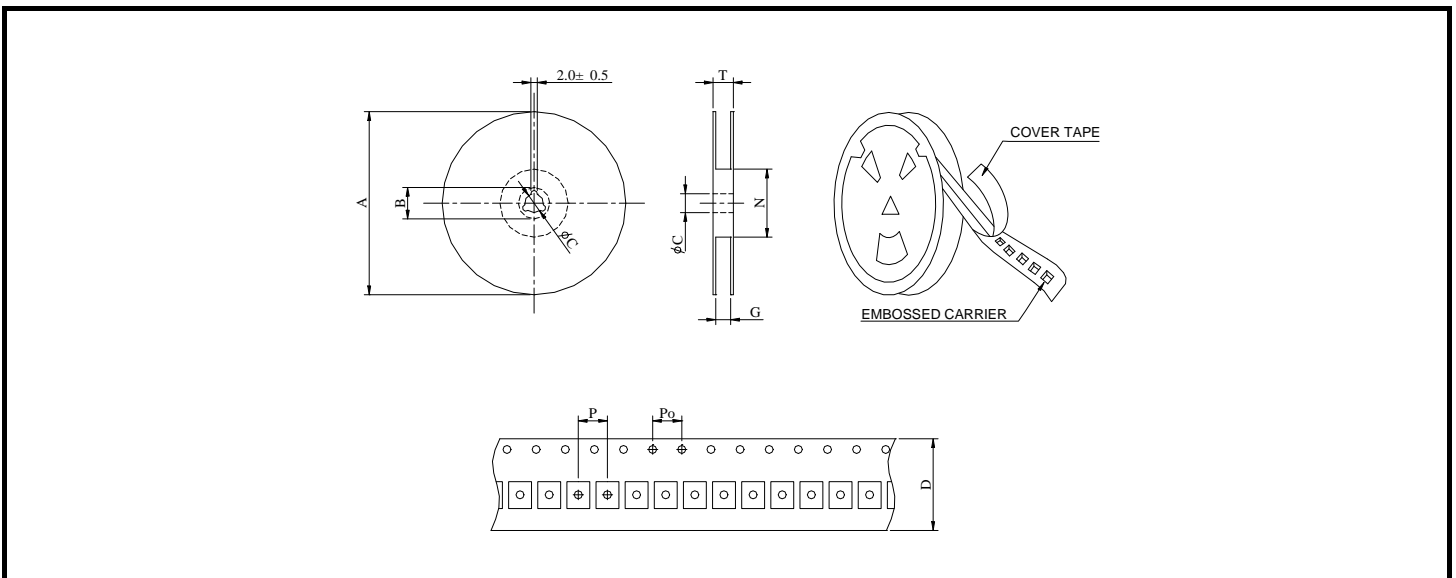
<u>ML</u>	<u>252010QP</u>	—	<u>2R2M</u>	—	<u>LF</u>
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

SHAPES AND DIMENSIONS

UNIT : mm



PACKAGING SPECIFICATION



SERIES	STAYLE	Q'TY (PCS)	DIMENSIONS (m/m)								
			A	B±0.8	C±0.5	D	G ⁺⁰	N ⁰	P	Po	T
ML252010QP	178	3,000	178	21	13	8	18	50	4	4	22.4

ML252010QP SERIES – High Current Power Inductors



SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	DCR (m Ω) Max. (Typ.)	Isat(A) Max. (Typ.)	Irms(A) Max. (Typ.)	TEST FREQ. (MHz)
ML252010QP-R22M-LF	0.22 \pm 20%	12.5 (9.0)	7.20 (7.9)	5.90 (5.6)	1MHz/1V
ML252010QP-R33M-LF	0.33 \pm 20%	26.0 (21)	6.00 (6.6)	4.40 (5.6)	1MHz/1V
ML252010QP-R47M-LF	0.47 \pm 20%	32.0 (27)	4.50 (5.0)	3.90 (5.2)	1MHz/1V
ML252010QP-R68M-LF	0.68 \pm 20%	44.0 (37)	3.87 (4.3)	3.40 (5.6)	1MHz/1V
ML252010QP-1R0M-LF	1.00 \pm 20%	54.0 (45)	3.15 (3.5)	3.00 (3.4)	1MHz/1V
ML252010QP-1R5M-LF	1.50 \pm 20%	91.0 (76)	2.34 (2.6)	2.50 (2.6)	1MHz/1V
ML252010QP-2R2M-LF	2.20 \pm 20%	119.0 (99)	2.16 (2.4)	2.30 (2.4)	1MHz/1V
ML252010QP-4R7M-LF	4.70 \pm 20%	262.0 (220)	1.62 (1.8)	1.36 (5.6)	1MHz/1V

FEATURES

1. **Magnetic shielding** allows high-density mounting
2. **Ultra-small shielded power inductor** – only 1 mm high, 2.5× 2 mm footprint
3. Handles **current up to 7.2 Amps**
4. Excellent mounting strength by SMD chip making
5. **Isat** means that DC current will cause a **30% inductance reduction** from initial value .
6. **Irms** means that DC current will cause **coil temperature rising to 40°C** whichever is smaller.
7. **RoHS-compliant.** 260°C compatible.
8. Operating Temperature Range : -40°C to +125°C