

SDC5D33 SERIES~ SMD Shielded Power Inductors

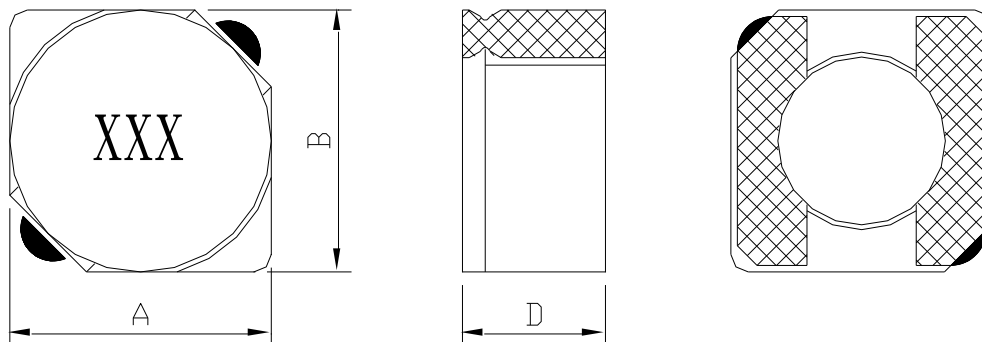


PART NUMBERING SYSTEM

SDC	5D33	—	681M	—	LF
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

SHAPES AND DIMENSIONS

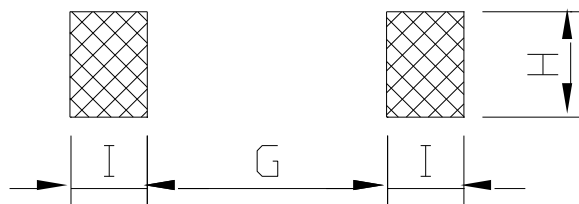
UNIT : mm



A=6.0 Max. B=6.0 Max. D=3.5 Max.

PCB LAYOUT

UNIT : mm



G=2.0 Ref. H=6.4 Ref. I=2.15 Ref.

FEATURES

- Compact, low profile shielded power inductor - only 3,5 mm high, 6,2 mm square
- 6.8 μ H part handles 2.8 Amps of saturating current!
- RoHS-compliant. 260°C compatible. Silver-palladium-platinum-glass frit terminations

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SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	DCR (Ω) (Max.)	Isat (A) (Max.)	Irms(A) (Max.)	SRF(MHz) (Typ.)
SDC5D33-6R8N-LF	6.8 \pm 30%	0.075	2.80	1.90	55
SDC5D33-8R2N-LF	8.2 \pm 30%	0.095	2.70	1.85	48
SDC5D33-100M-LF	10 \pm 20%	0.100	2.50	1.80	37
SDC5D33-120M-LF	12 \pm 20%	0.110	2.30	1.75	29
SDC5D33-150M-LF	15 \pm 20%	0.125	2.00	1.70	25
SDC5D33-180M-LF	18 \pm 20%	0.140	1.90	1.65	24
SDC5D33-220M-LF	22 \pm 20%	0.145	1.70	1.60	24
SDC5D33-330M-LF	33 \pm 20%	0.180	1.50	1.30	16
SDC5D33-470M-LF	47 \pm 20%	0.245	1.20	1.15	13
SDC5D33-560M-LF	56 \pm 20%	0.280	1.10	1.07	12
SDC5D33-680M-LF	68 \pm 20%	0.345	0.96	1.00	10.8
SDC5D33-820M-LF	82 \pm 20%	0.315	0.55	0.95	10.0
SDC5D33-101M-LF	100 \pm 20%	0.375	0.54	0.90	9.0
SDC5D33-121M-LF	120 \pm 20%	0.435	0.51	0.80	8.3
SDC5D33-151M-LF	150 \pm 20%	0.535	0.45	0.73	7.3
SDC5D33-221M-LF	220 \pm 20%	0.720	0.37	0.64	5.6
SDC5D33-331M-LF	330 \pm 20%	1.020	0.30	0.55	4.4
SDC5D33-471M-LF	470 \pm 20%	1.580	0.26	0.50	3.6
SDC5D33-561M-LF	560 \pm 20%	1.750	0.23	0.46	3.1
SDC5D33-681M-LF	680 \pm 20%	1.970	0.21	0.40	2.8
SDC5D33-821M-LF	820 \pm 20%	2.700	0.19	0.33	2.5
SDC5D33-102M-LF	1000 \pm 20%	3.200	0.18	0.30	2.2
SDC5D33-152M-LF	1500 \pm 20%	4.600	0.14	0.26	1.9
SDC5D33-182M-LF	1800 \pm 20%	5.420	0.13	0.23	1.7
SDC5D33-222M-LF	2200 \pm 20%	6.400	0.11	0.22	1.5
SDC5D33-332M-LF	3300 \pm 20%	8.900	0.10	0.18	1.1
SDC5D33-472M-LF	4700 \pm 20%	14.00	0.084	0.15	0.94
SDC5D33-562M-LF	5600 \pm 20%	16.40	0.085	0.13	0.86
SDC5D33-682M-LF	6800 \pm 20%	21.40	0.080	0.12	0.80
SDC5D33-822M-LF	8200 \pm 20%	24.00	0.078	0.115	0.70
SDC5D33-103M-LF	10000 \pm 20%	29.00	0.074	0.11	0.61

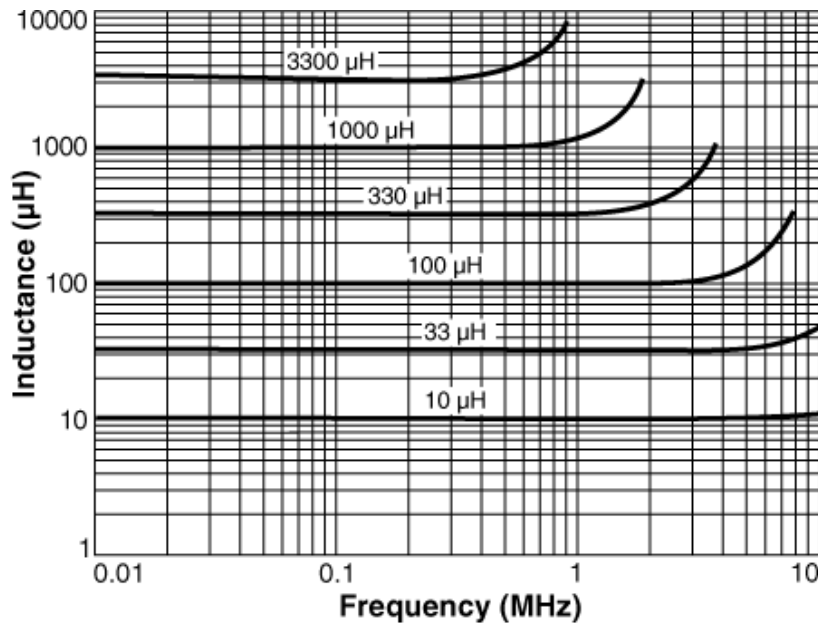
- Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.
- Isat : DC current at which the inductance drops 30% (typ) from its value without current.
- Irms: The actual current when temperature of coil becomes $\Delta 40^{\circ}\text{C}$. (Ta=+25 $^{\circ}\text{C}$)
- Operating temperature range -40 $^{\circ}\text{C}$ to +125 $^{\circ}\text{C}$, Electrical specifications at 25 $^{\circ}\text{C}$.



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TYPICAL INDUCTANCE VS. FREQUENCY



TYPICAL INDUCTANCE VS. CURRENT

