

SDC5D23 SERIES

Low Profile Shielded Power Inductors



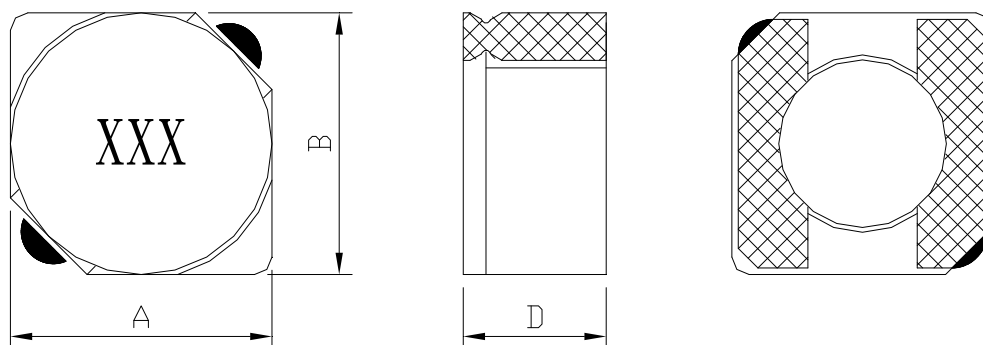
RoHS Compliant

PART NUMBERING SYSTEM

<u>SDC</u>	<u>5D23</u>	—	<u>680M</u>	—	<u>LF</u>
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

SHAPES AND DIMENSIONS

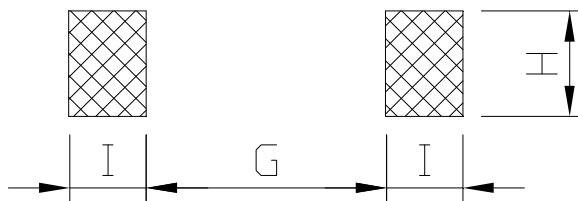
UNIT : mm



A=6.0 Max. B=6.0 Max. D=2.5 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 2,5 mm high, 6,2 mm square
- **1.2 μ H** part handles **5.4 Amps** of saturating current!
- Ideal for **high-density applications**
- **RoHS-compliant.** 260°C compatible. Silver-palladium-platinum-glass frit terminations

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SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	DCR (m Ω) (Max.)	Isat (A) (Max.)	Irms(A) (Max.)	SRF(MHz) (Typ.)
SDC5D23-1R2N-LF	1.2 $\pm$ 30%	0.040	5.40	1.65	178
SDC5D23-2R2N-LF	2.2 $\pm$ 30%	0.045	4.10	1.40	100
SDC5D23-3R3N-LF	3.3 $\pm$ 30%	0.055	3.60	1.35	68
SDC5D23-4R7N-LF	4.7 $\pm$ 30%	0.065	3.20	1.30	53
SDC5D23-6R8N-LF	6.8 $\pm$ 30%	0.095	2.80	1.30	40
SDC5D23-100M-LF	10 $\pm$ 20%	0.105	2.20	1.30	35
SDC5D23-150M-LF	15 $\pm$ 20%	0.135	2.20	1.20	23
SDC5D23-220M-LF	22 $\pm$ 20%	0.175	1.60	1.10	17
SDC5D23-330M-LF	33 $\pm$ 20%	0.260	1.20	0.90	14
SDC5D23-470M-LF	47 $\pm$ 20%	0.360	1.00	0.80	10
SDC5D23-680M-LF	68 $\pm$ 20%	0.420	0.62	0.74	9.6
SDC5D23-101M-LF	100 $\pm$ 20%	0.610	0.52	0.64	7.7
SDC5D23-121M-LF	120 $\pm$ 20%	0.750	0.46	0.58	7.4
SDC5D23-151M-LF	150 $\pm$ 20%	0.920	0.42	0.54	6.4
SDC5D23-221M-LF	220 $\pm$ 20%	1.30	0.35	0.50	5.0
SDC5D23-331M-LF	330 $\pm$ 20%	2.00	0.28	0.39	3.8
SDC5D23-471M-LF	470 $\pm$ 20%	2.60	0.24	0.37	3.2
SDC5D23-681M-LF	680 $\pm$ 20%	4.00	0.20	0.26	2.8
SDC5D23-102M-LF	1000 $\pm$ 20%	6.00	0.17	0.22	2.3
SDC5D23-152M-LF	1500 $\pm$ 20%	9.00	0.13	0.17	1.8
SDC5D23-182M-LF	1800 $\pm$ 20%	11.7	0.12	0.14	1.7
SDC5D23-222M-LF	2200 $\pm$ 20%	13.5	0.11	0.13	1.3
SDC5D23-332M-LF	3300 $\pm$ 20%	21.0	0.11	0.11	1.1
SDC5D23-472M-LF	4700 $\pm$ 20%	30.0	0.10	0.090	0.90
SDC5D23-562M-LF	5600 $\pm$ 20%	36.0	0.096	0.090	0.72
SDC5D23-682M-LF	6800 $\pm$ 20%	43.0	0.089	0.080	0.70
SDC5D23-822M-LF	8200 $\pm$ 20%	54.0	0.088	0.075	0.69
SDC5D23-103M-LF	10000 $\pm$ 20%	70.0	0.087	0.065	0.68

- 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°C)
- Operating temperature range -40°C to +125°C , Electrical specifications at 25°C.

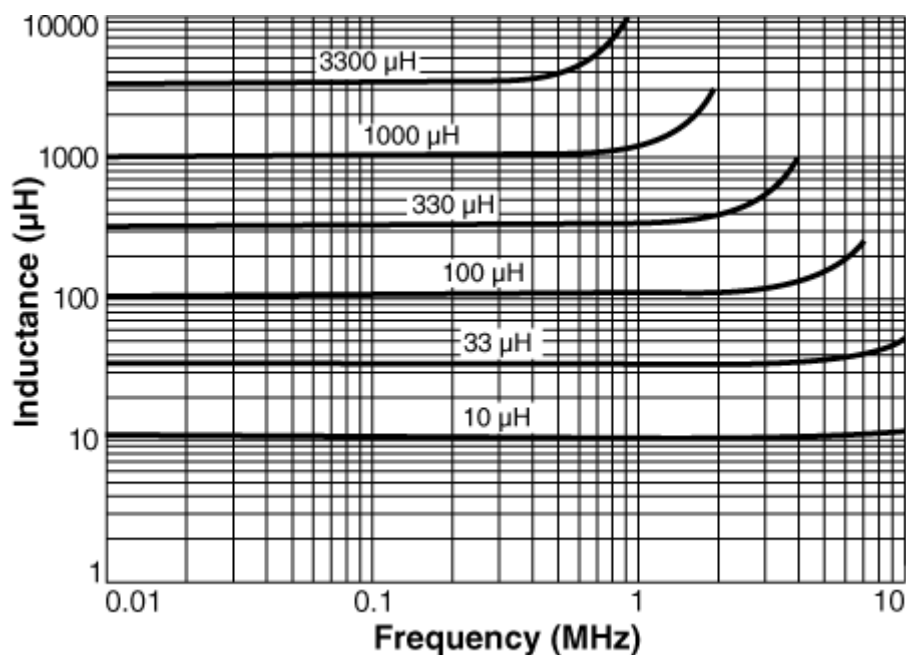
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TYPICAL INDUCTANCE VS. FREQUENCY



RoHS Compliant



TYPICAL INDUCTANCE VS. CURRENT

