

SD01813 SERIES ~ SMD Power Inductors



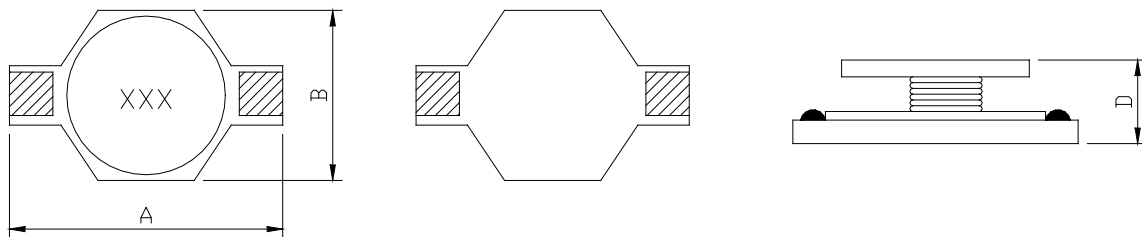
PART NUMBERING SYSTEM

RoHS Compliant

SDO	1813	—	R18M	—	LF
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

SHAPES AND DIMENSIONS

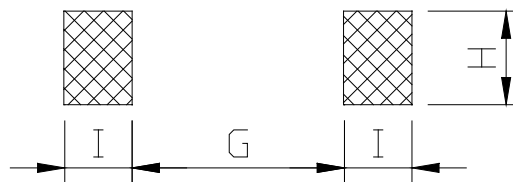
UNIT : mm



A=8.89 Max. B=6.5 Max. D=5.3 Max.

RECOMMENDED PATTERNS

UNIT : mm



H= 4.06 G= 5.08 I = 1.9

FEATURES

- Small high current inductor - **only 0.24" x 0.35" x 0.197" high**
- Very high current ratings - **up to 10 A rms; 14.0 A saturating current**
- **Exceptionally low DC resistance** thanks to the use of heavier gauge wire
- **Flat top and self-leaded design** for reliable surface mounting
- **Robust temperature deflection** prevents damage during solder reflow
- Custom versions available
- **RoHS-compliant.** 260°C compatible

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SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	DCR(Ω) (Max.)	Isat (A) (Max.)	Irms (A) (Max.)	SRF(MHz) (Ref.)
SDO1813-R18M-LF	0.18 $\pm$ 20%	0.003	14.0	10.0	800
SDO1813-R33M-LF	0.33 $\pm$ 20%	0.004	10.0	7.00	600
SDO1813-R56M-LF	0.56 $\pm$ 20%	0.010	7.70	6.00	200
SDO1813-1R0M-LF	1.2 $\pm$ 20%	0.017	5.30	4.40	140
SDO1813-2R2M-LF	2.2 $\pm$ 20%	0.035	3.50	3.10	100
SDO1813-3R3M-LF	3.3 $\pm$ 20%	0.040	3.00	2.70	80
SDO1813-4R7M-LF	4.7 $\pm$ 20%	0.054	2.60	2.20	50
SDO1813-6R8M-LF	6.8 $\pm$ 20%	0.080	2.20	1.80	45
SDO1813-8R2M-LF	8.2 $\pm$ 20%	0.092	2.00	1.60	42
SDO1813-100M-LF	10 $\pm$ 20%	0.110	1.90	1.50	40
SDO1813-150M-LF	15 $\pm$ 20%	0.170	1.50	1.20	30
SDO1813-220M-LF	22 $\pm$ 20%	0.250	1.20	1.00	25
SDO1813-330M-LF	33 $\pm$ 20%	0.350	0.99	0.82	20
SDO1813-470M-LF	47 $\pm$ 20%	0.470	0.87	0.72	15

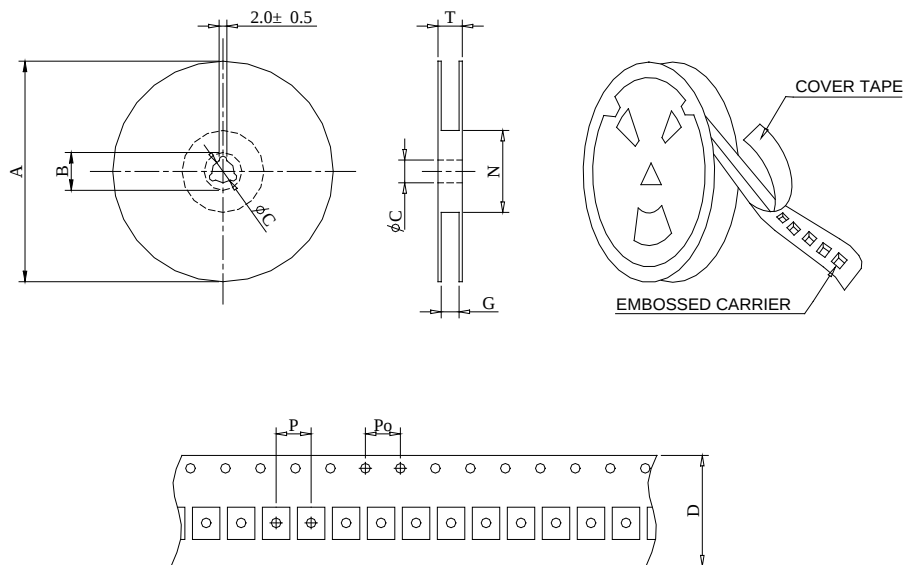
- Isat: DC current at which the inductance drops 30% (typ) from its value without current.
- Irms: Current that causes a 40°C temperature rise from 25°C ambient.
- Operating temperature range -55°C to +125°C .
- Electrical specifications at 25°C.
- Packing : 13" reel, machine-ready ,embossed plastic tape (1,000 parts per full reel).

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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
SDO1813	13-16	1000	330	21	13	16	18	50	12	4	22.4