

SMT POWER INDUCTOR

SMB1007B SERIES

FEATURES:

- Ferrite based SMT inductor with lower core loss.
- Inductance Range: 330.0nH to 1600.0nH, Custom values are welcomed.
- High current output chokes, up to 65.0 Amp with approx. 20% roll off.
- 10.00 mm Max. height.
- Perfect for high density designs with limited board space.
- Operating frequency up to 5.0 MHz application.
- Operating Temperature Range -55°C to + 130°C , RoHs & HF compliance .
- T & R Qtys: 400 pcs , 13" Reel ;

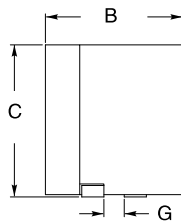
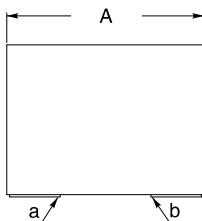


ELECTRICAL CHARACTERISTICS :

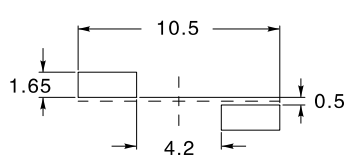
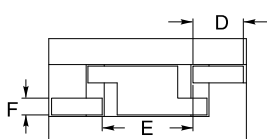
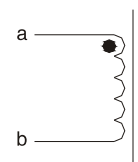
Part No.	OCL (nH) $\pm 15\%$	L@Isat1 (nH) Min	DCR (m Ω) $\pm 10\%$	Isat1 (A) @ 25°C	Isat2 (A) @ 75°C	Isat3 (A) @ 100°C	Irms (A) @ 25°C	Dim. B Max
SMB1007B-R33L	330	231	0.81	65	58	53	30	7.3
SMB1007B-R47L	470	329	0.81	48	40	38	30	7.0
SMB1007B-R68L	680	476	0.81	34	31	29	30	7.0
SMB1007B-R82L	820	574	0.81	28	25	23	30	7.0
SMB1007B-1R0L	1000	700	0.81	23	19	18	30	7.0
SMB1007B-1R2L	1200	840	0.81	20	17	15	30	7.0
SMB1007B-1R4L	1400	980	0.81	16	14	13	30	7.0
SMB1007B-1R6L	1600	1120	0.81	14	13	12	30	7.0

1. Open Circuit Inductance (OCL) test condition:100KHz,0.1Vrms,0Adc ,at 25°C
2. L @ Isat and L @ Irms Test condition:100KHz,0.1Vrms(Ta=25°C)
3. The nominal DCR is measured from point "a" to point "b", as shown above on the mechanical drawing (Ta=25°C)
4. Isat1,Isat2 , & Isat3 : DC current that will cause inductance to drop approximately by 20%.
5. Irms: DC current for an approximate temperature rise of 40°C without core loss , Derating is necessary for AC currents. PCB pad layout , trace thickness and width , air-flow and proximity of other heat generating components will affect the temperature rise. It is recommended the part temperature not exceed 130°C under worst case operating conditions verified in the end application.

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



Winding

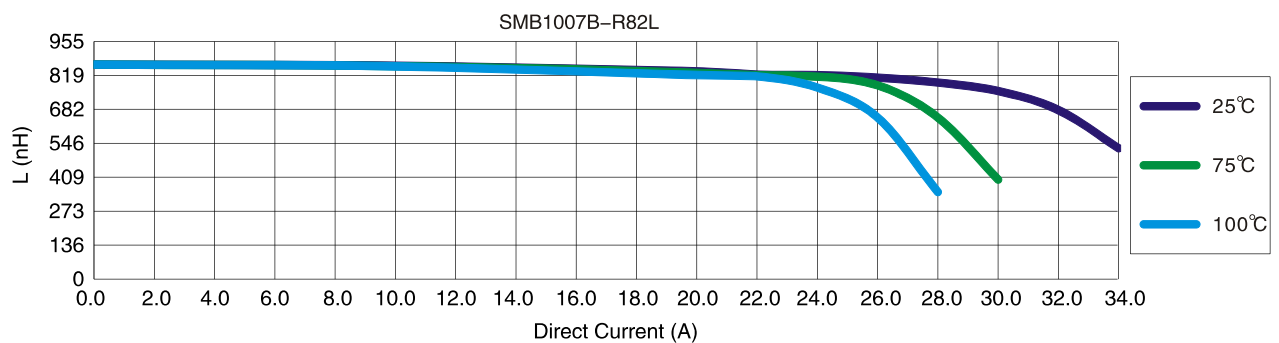
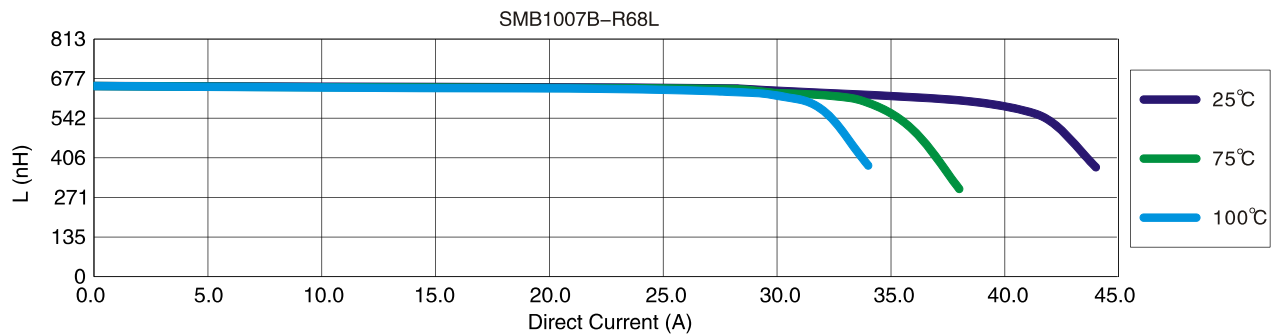
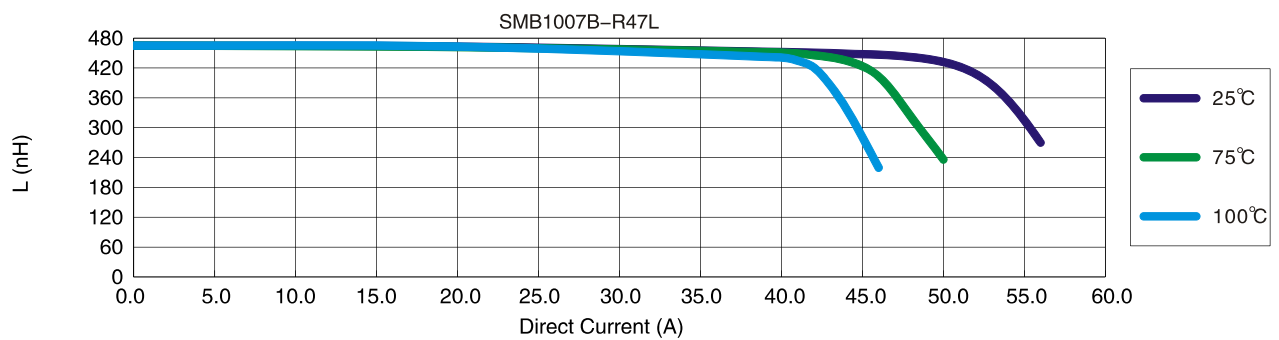
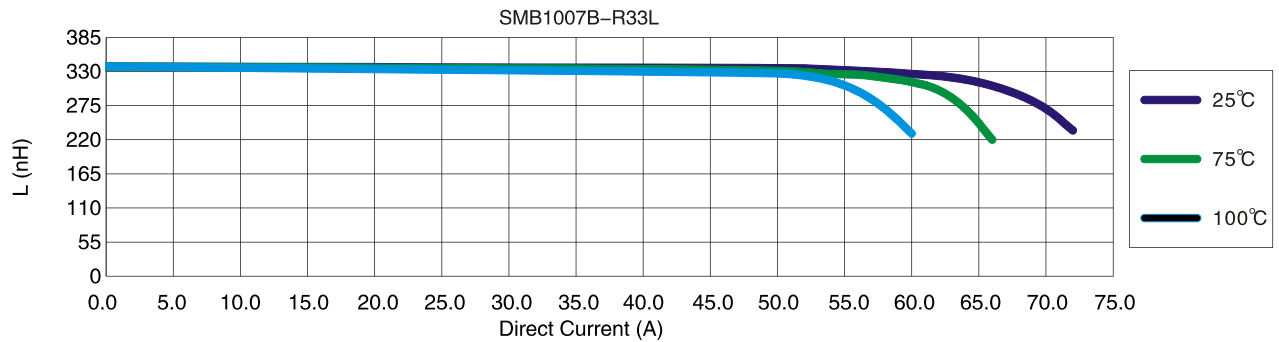


Suggested Pad Layout

Mechanical Dimension(Unit : mm)

A Max	B Max	C Max	D ± 0.35	E Nom	F ± 0.2	G ± 0.3
10.0	see above table	10.0	2.5	4.5	1.1	1.0

CURRENT VS INDUCTANCE:



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