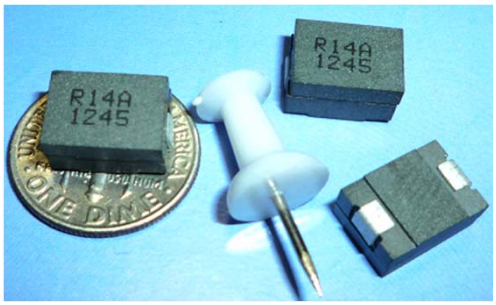
SL43248 Series

1. Features:



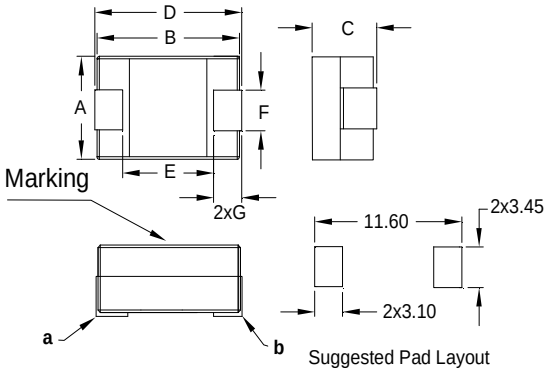
- Ferrite based SMD Inductor with lower core loss.
- Inductance Range:120nH to 140nH , Custom values are welcomed.
- High current output chokes, upto 82.0 Amp with approx. 20% roll off.
- Low Profile 6.0mm Max. height .
- Foot Print 11.0 x 8.0 mm Max.
- Ideal for Buck Converter, VRM & High Density Board Design.
- Operating frequency up to 1 MHz application.
- Operating Temperature Range -55°C to + 130°C , RoHs & HF compliance .
- T & R Qtys: 700 pcs , 13" Reel ;

2. Electrical Characteristic of SL43248 Series:

ITG Part Number	Inductance (uH) ±10%	DCR (mΩ) ± 5.0%	Isat[1] (A) @25℃	Isat[2] (A) @75℃	Isat[3] (A) @100℃	Irms (A) @25℃
SL43248A-R12KHF	0.120	0.195	82.00	76.00	72.00	65.00
SL43248B-R12KHF	0.120	0.220	82.00	76.00	72.00	61.00
SL43248A-R14KHF	0.140	0.195	72.00	67.00	64.00	65.00
SL43248B-R14KHF	0.140	0.220	72.00	67.00	64.00	61.00

3. Mechanical Dimension(Unit:mm):

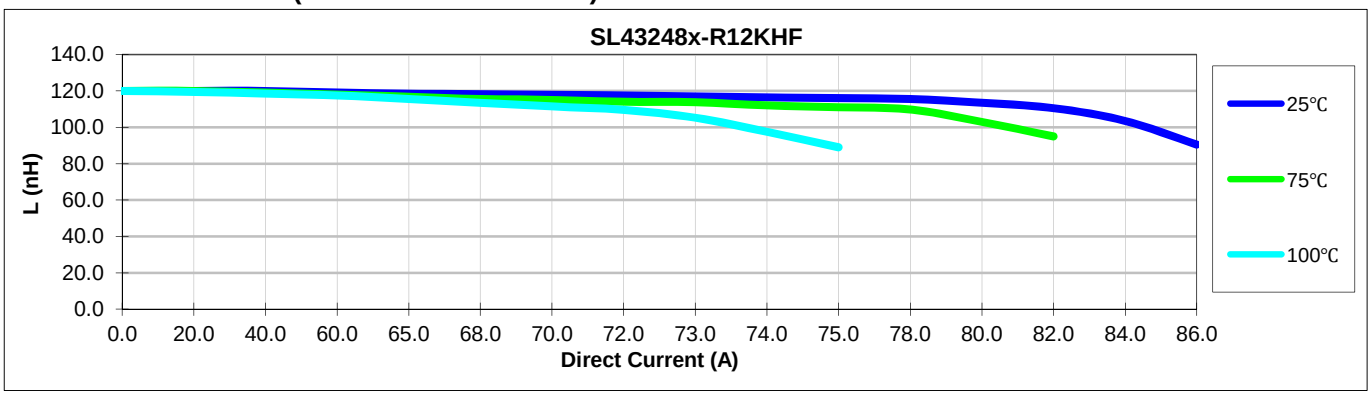
A Max.	B Max.	C Max.	D Max.	E Nom.	F Nom.	G Nom.
8.00	10.90	6.00	11.00	6.80	2.90	2.00



Note:

1>.Open Circuit Inductance (OCL) test condition:100KHz,0.1Vrms,0Adc ,at 25 ℃.
2>.Full Load Inductance (FLL) Test condition:100KHz,0.1Vrms ,Isat ;(Ta=25 ℃).
3>.Isat[1],Isat[2]&Isat[3]: DC current that will cause inductance to drops approximately by 20% ;
4>. Irms: DC current for an approximate temperature rise of 40℃ 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.
5>.The nominal DCR is measured from point "a" to point"b",as shown above on the mechanical drawing.

4. Inductance Characteristics (Inductance vs. Current):



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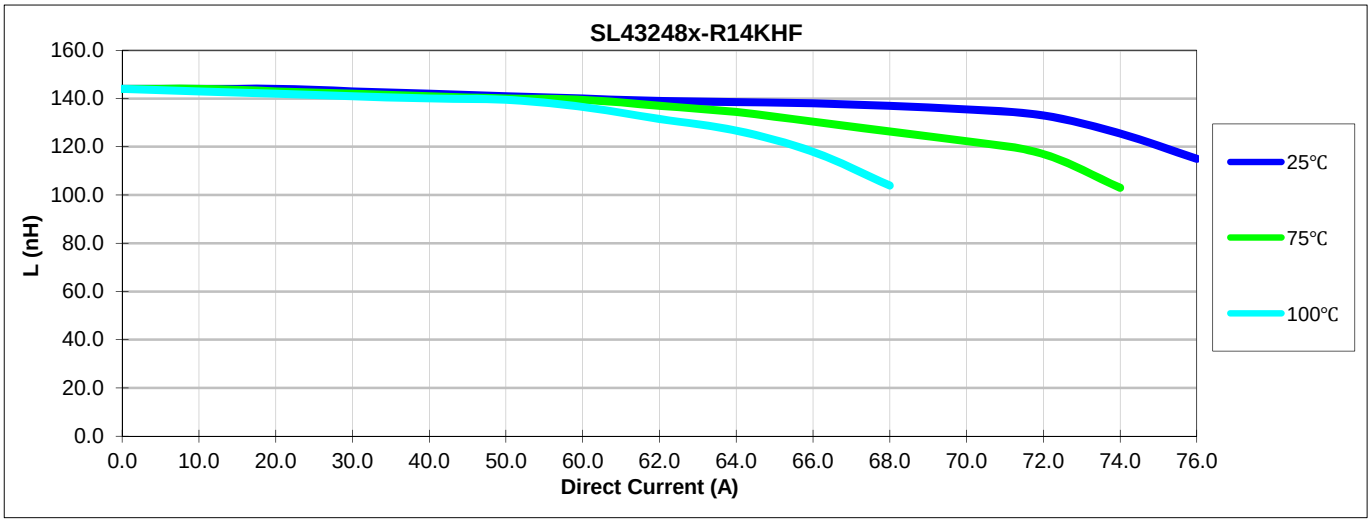
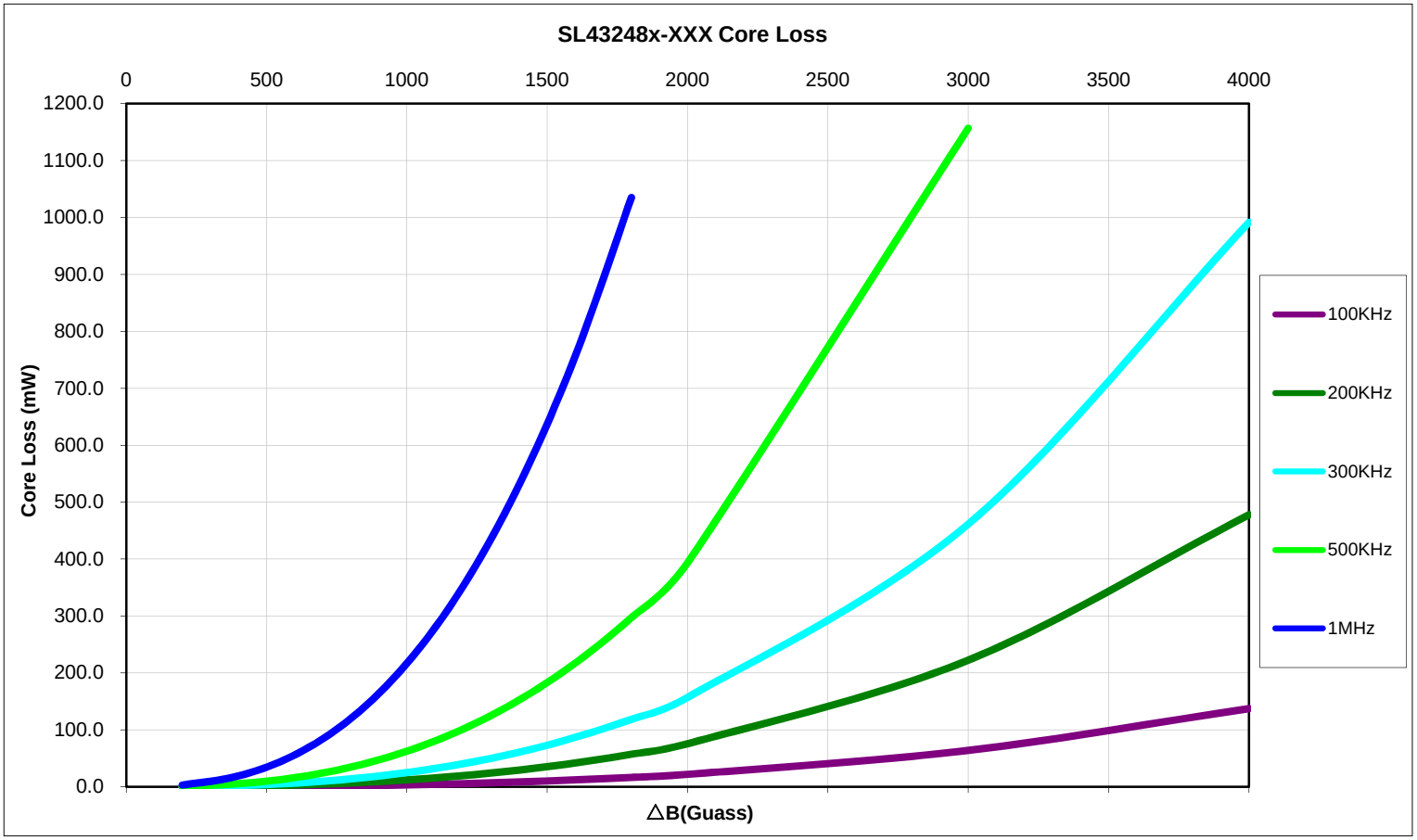


5. Core Loss:



Where △B=0.40*L(nH)*△I