

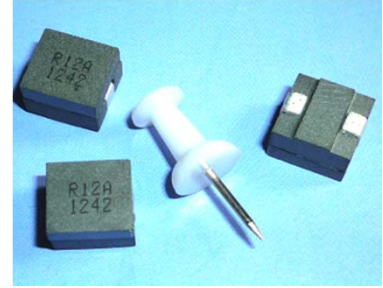


SL413210 Series



1. Features:

- Ferrite based SMD Inductor with lower core loss.
- Inductance Range:120nH to 170nH. Custom values are welcomed.
- High current output chokes, upto 104 Amp with approx. 20% roll off.
- Low Profile 8.00mm Max. height .
- Foot Print 10.41 x 9.50 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: 450 pcs , 13" Reel ;

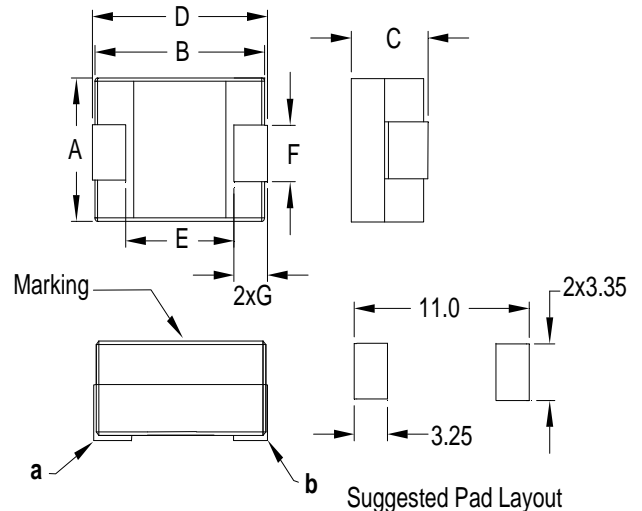


2. Electrical Characteristic of SL413210 Series:

Part Number	Inductance (uH) ±10%	DCR (mΩ) ± 5.0%	Isat ¹ (A) @25°C	Isat ² (A) @75°C	Isat ³ (A) @100°C	Irms (A) @25°C
SL413210A-R12KHF	0.120	0.190	104.00	100.00	95.00	75.00
SL413210B-R12KHF	0.120	0.200	104.00	100.00	95.00	73.00
SL413210A-R15KHF	0.150	0.190	87.00	84.00	80.00	75.00
SL413210B-R15KHF	0.150	0.200	87.00	84.00	80.00	73.00
SL413210A-R17KHF	0.170	0.190	78.00	73.00	70.00	75.00
SL413210B-R17KHF	0.170	0.200	78.00	73.00	70.00	73.00

3. Mechanical Dimension(Unit:mm):

A	B	C	D	E	F	G
Max.	Max.	Max.	Max.	Nom.	Nom.	Nom.
9.50	10.30	8.00	10.41	5.20	2.80	2.40



Note:

- 1>.Open Circuit Inductance (OCL) test condition:100KHz,0.1Vrms,0Adc ,at 25 °C.
- 2>.Full Load Inductance (FLL) Test condition:100KHz,0.1Vrms ,Isat ;(Ta=25 °C).
- 3>.Isat¹,Isat² & Isat³ : DC current that will cause inductance to drops approximately by 20% ;
- 4>. 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.
- 5>.The nominal DCR is measured from point "a" to point"b",as shown above on the mechanical drawing.

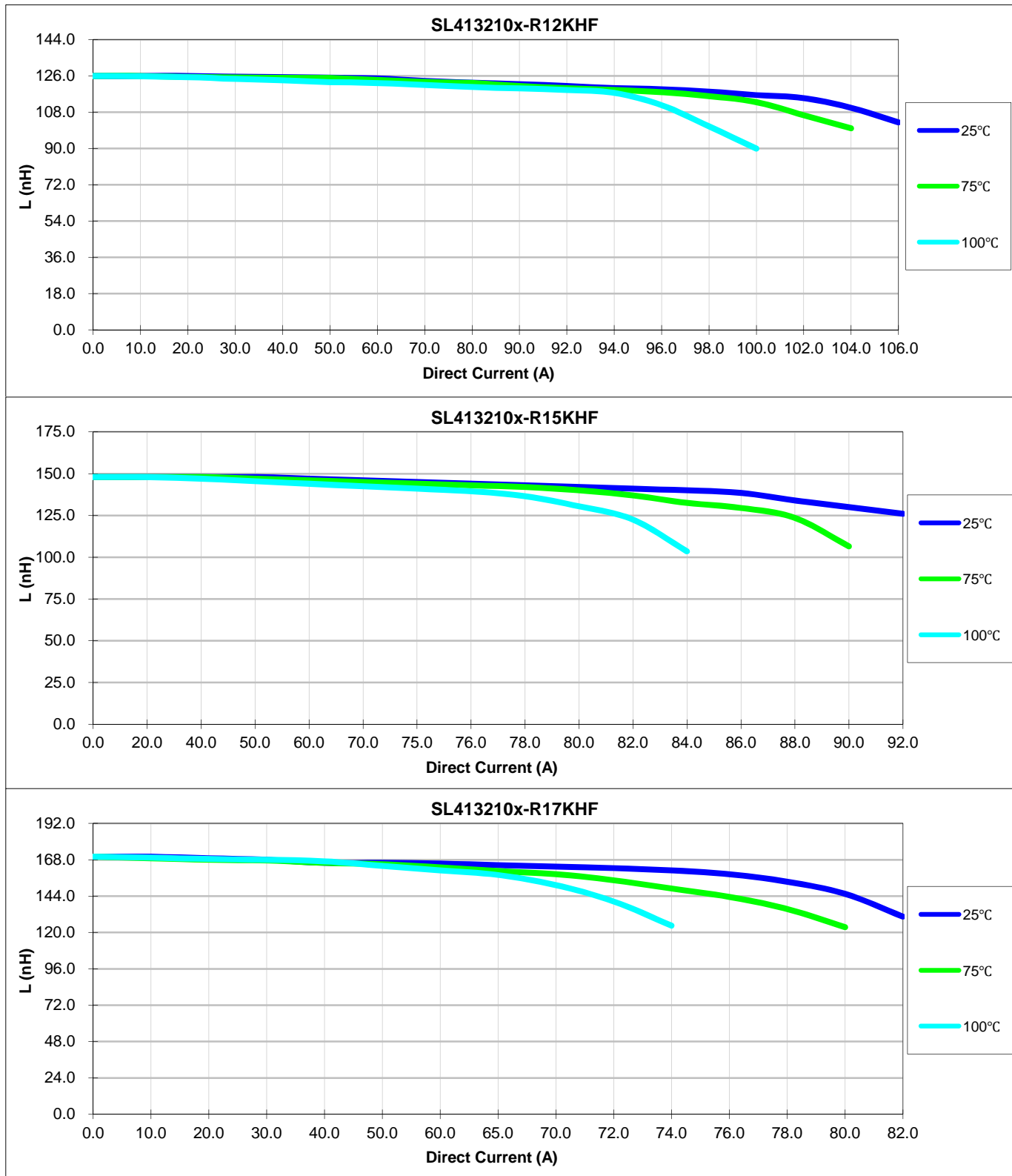
4. Inductance Characteristics (Inductance vs. Current):



SL413210 Series



Inductance vs. Current

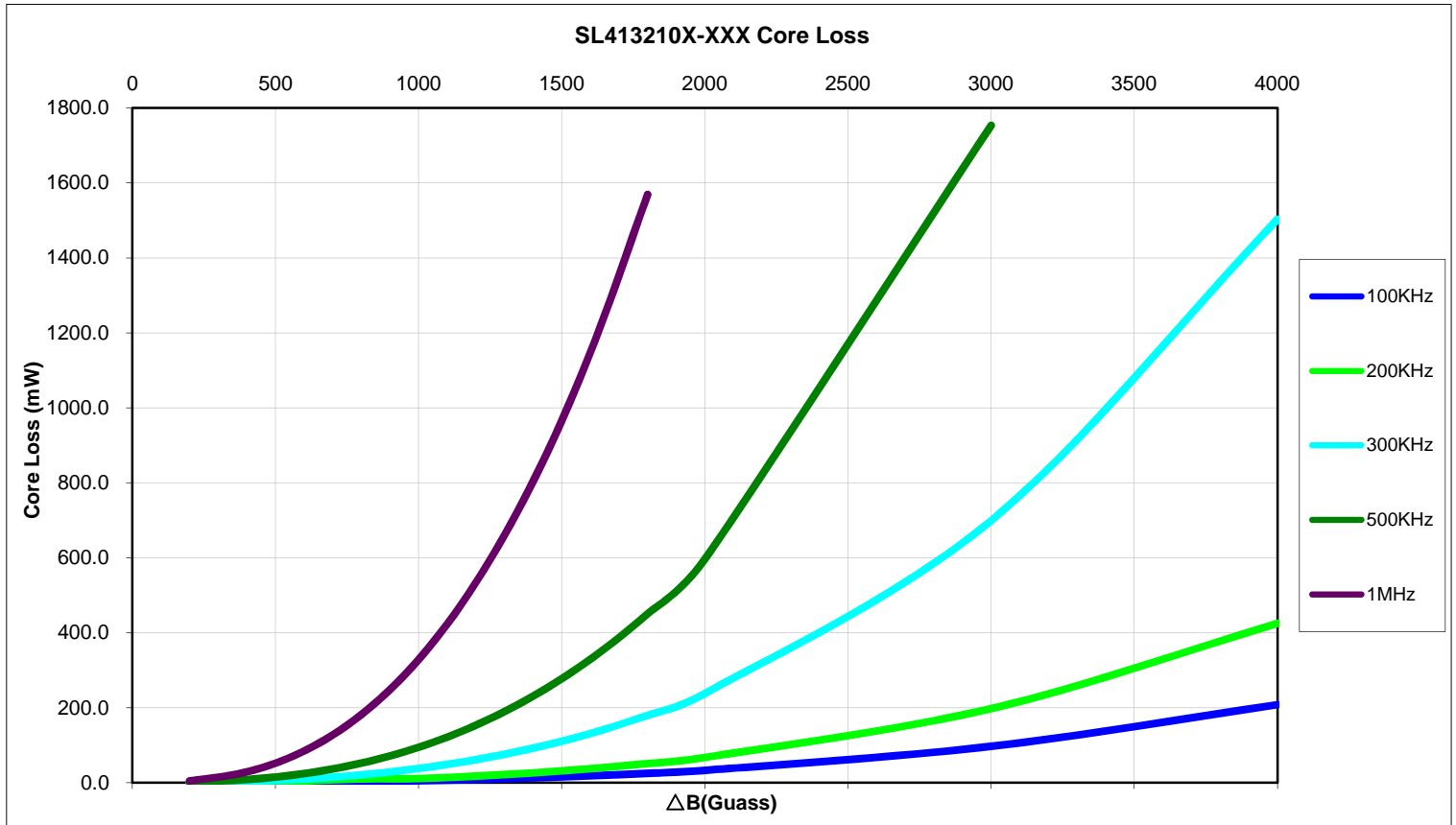




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5. Core Loss:



Where $\Delta B = 0.31 * L(nH) * \Delta I$