

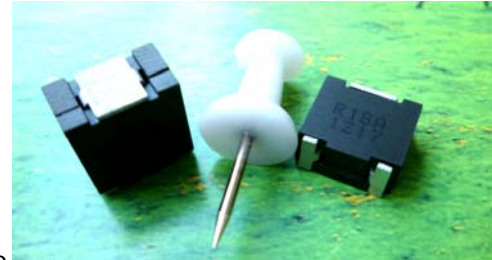


SLA40476 Series



1. Features:

- Ferrite based SMD Inductor with lower core loss.
- Custom values are welcomed.
- High current output chokes, upto 87.0 Amp with approx. 20% roll off.
- Low Profile 11.9mm Max. height .
- Foot Print 10.2 x 5.75 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 .

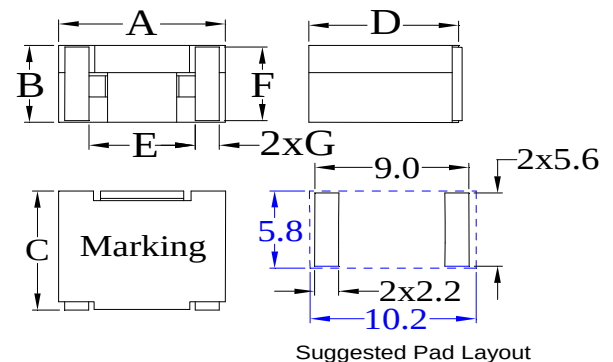


2. Electrical Characteristic of SLA40476 Series:

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
SLA40476A-R18KHF	0.18	0.44	87.0	80.0	73.0	48.0
SLA40476A-R22KHF	0.22	0.44	70.0	65.0	60.0	48.0
SLA40476A-R32KHF	0.32	0.44	48.0	44.0	42.0	48.0

3. Mechanical Dimension(Unit:mm):

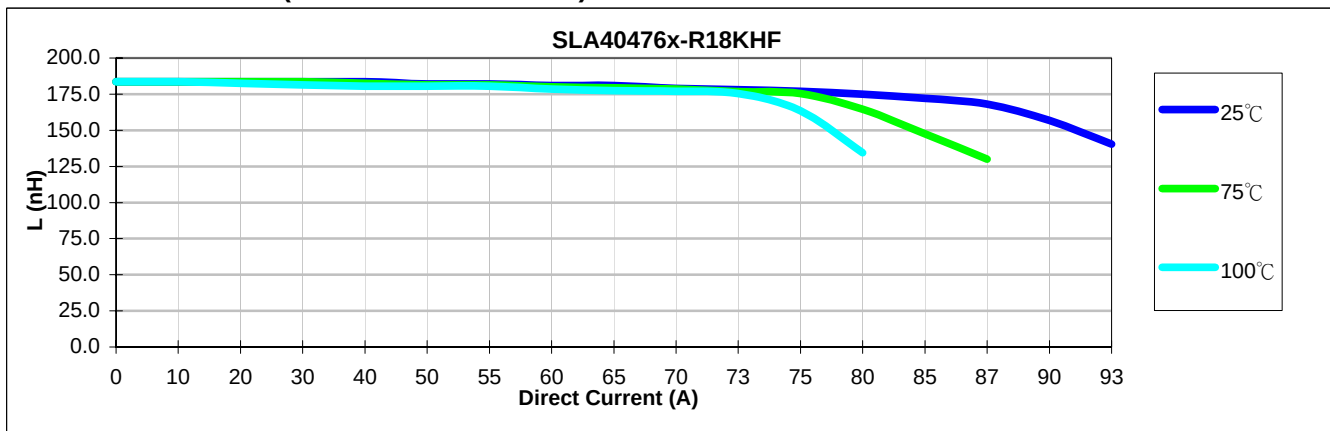
A	B	C	D	E	F	G
Max.	Max.	Max.	Max.	Nom.	Nom.	Nom.
10.20	5.75	11.90	11.70	5.90	5.00	1.45



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.

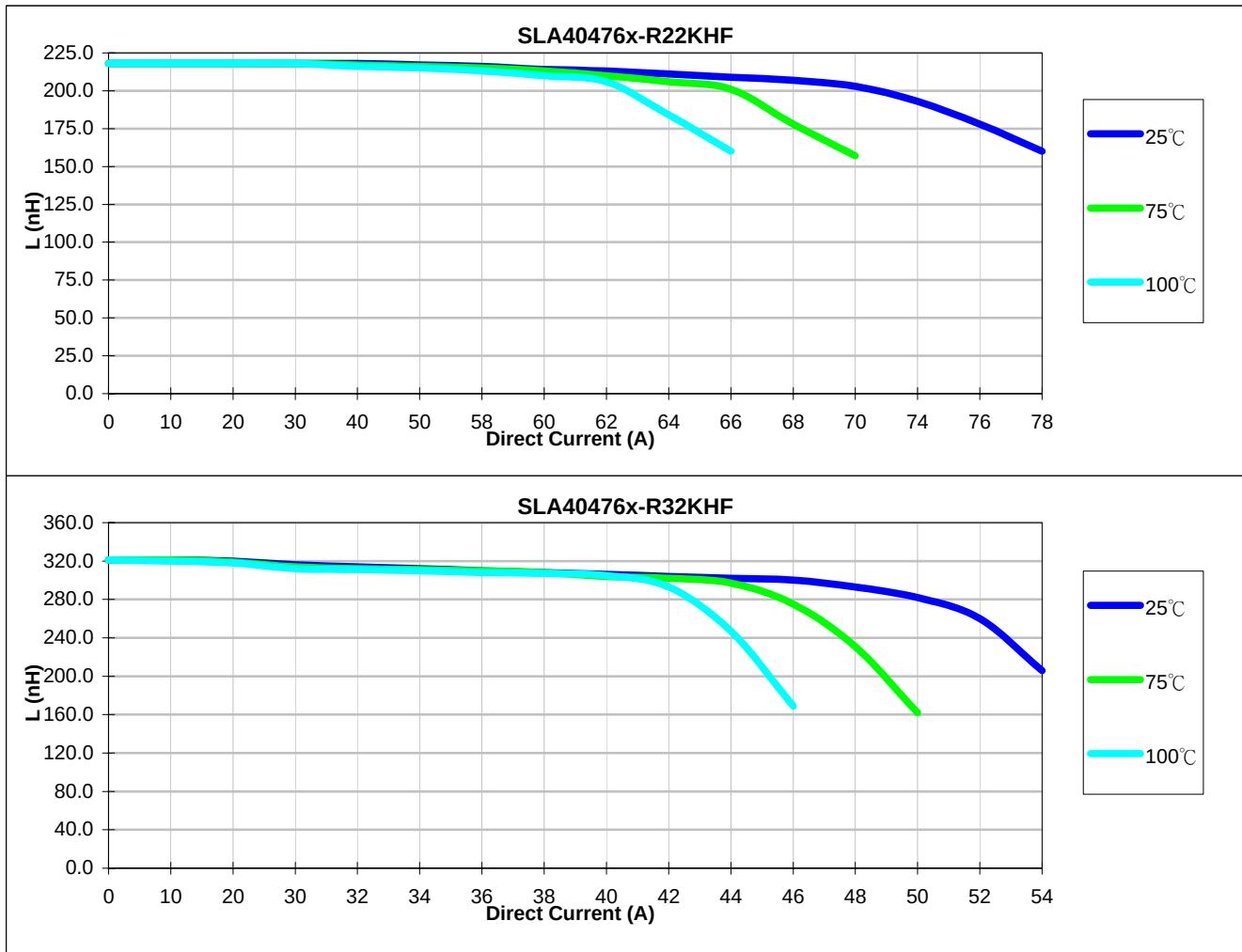
4. Inductance Characteristics (Inductance vs. Current):



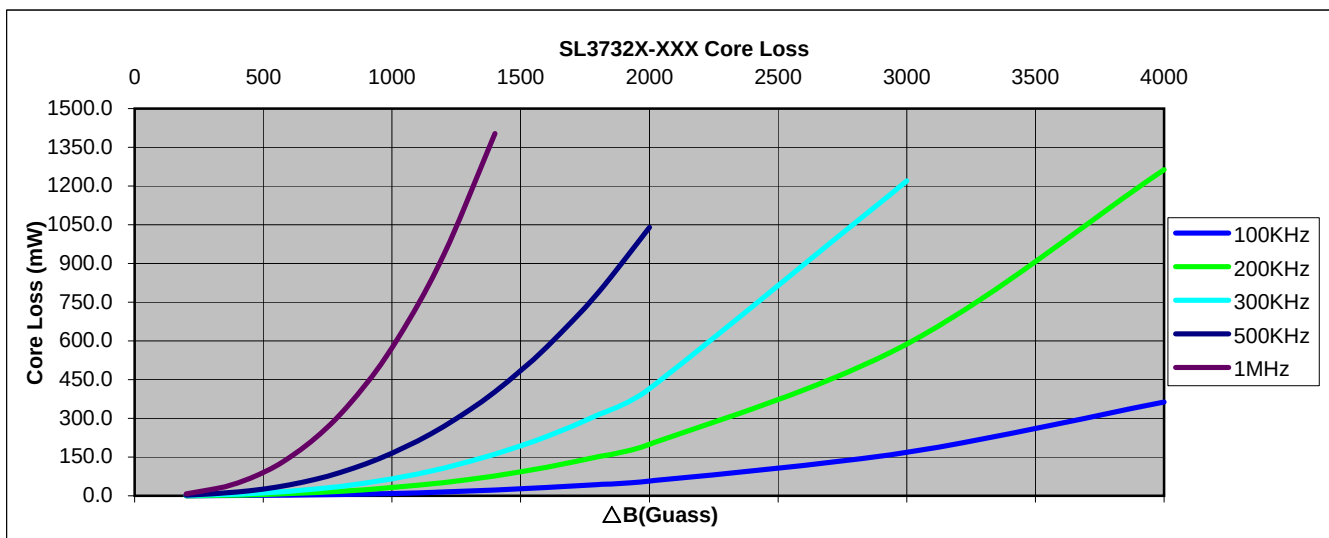


SLA40476 Series

Inductance vs. Current



5. Core Loss:



Where $\Delta B = 0.453 \cdot L(nH) \cdot \Delta I$