

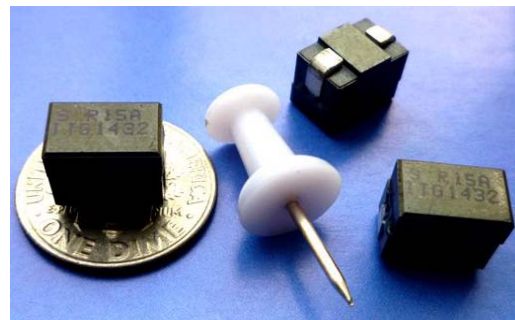


SL3933 Series



1. Features:

- Ferrite based SMD inductor with lower core loss.
- Inductance Range:120.0nH to 150.0nH. Custom values are welcomed.
- High current output chokes, up to 81.0 Amp with approx. 20% roll off.
- Low profile 8.50mm Max. height.
- Foot Print 10.00 x 6.40 mm Max.
- Ideal for Buck Converter, VRM & High Density Board Design.
- Operating frequency up to 1.0 MHz.
- Operating Temperature Range -55°C to + 130°C , RoHs & HF compliant.
- T & R Qty: 550 pcs , 13" Reel.

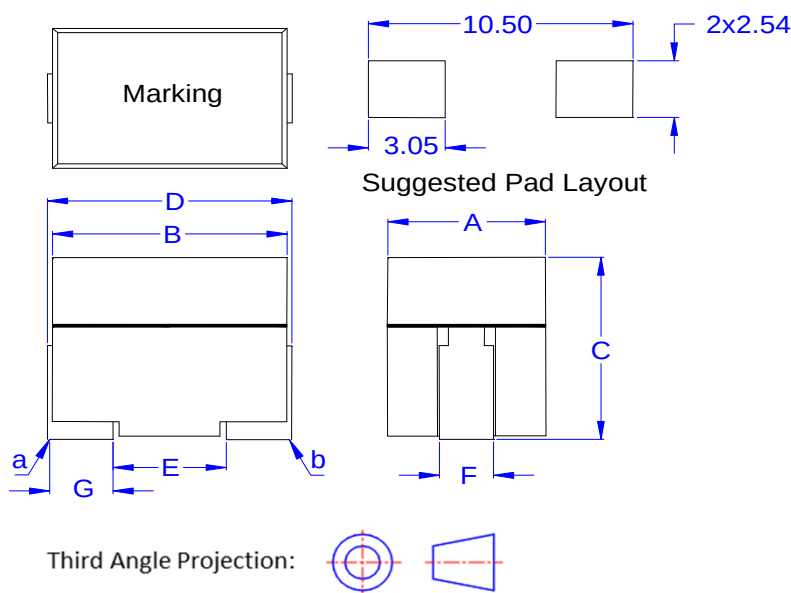


2. Electrical Characteristic of SL3933 Series:

ITG Part Number	OCL ¹ (nH) ±10%	L @ Isat1 ² (nH) Min.	DCR ³ (mΩ) ± 5.0%	Isat1 ⁴ (A) @25°C	Isat2 ⁴ (A) @75°C	Isat3 ⁴ (A) @100°C	Irms ⁵ (A) @25°C
SL3933A-R12KHF	120.00	86.40	0.20	81.00	75.00	71.00	61.00
SL3933A-R15KHF	150.00	108.00	0.20	64.00	60.00	54.50	61.00

3. Mechanical Dimension (Unit:mm):

A (Max.)	B (Max.)	C (Max.)	D (Max.)	E (Ref.)	F ± 0.20	G ± 0.30
6.40	9.50	8.50	10.00	5.00	2.20	2.50



Notes:

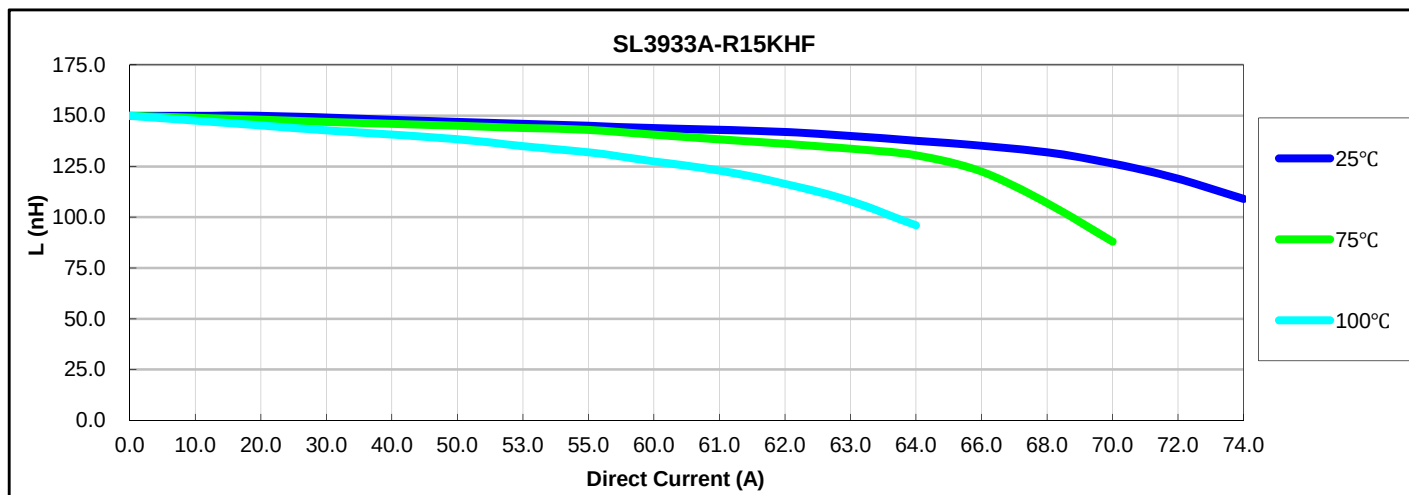
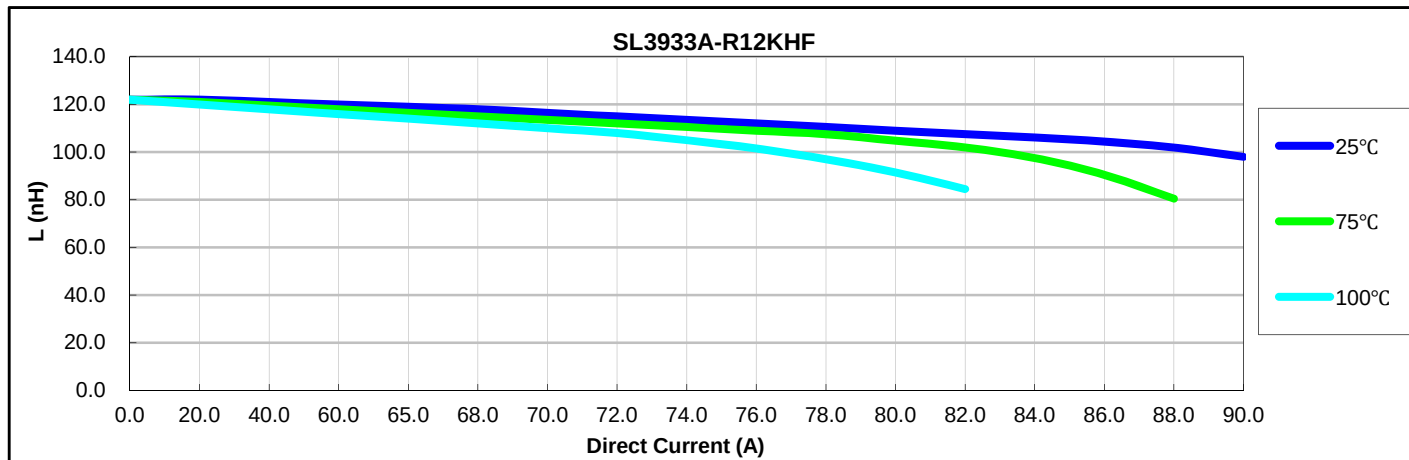
- 1> Open Circuit Inductance (OCL) test condition:100KHz, 0.1Vrms, 0Adc at 25°C.
- 2> L @ Isat and L @ Irms test condition: 100KHz,0.1Vrms (Ta=25°C).
- 3> The nominal DCR is measured from point "a" to point"b",as shown above on the mechanical drawing (Ta=25°C).
- 4> Isat1,Isat2 & Isat3 : DC current that 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 as verified in the end application.



SL3933 Series



4. Inductance Characteristics (Inductance vs. Current):



5. Core Loss:



Where $\Delta B = 0.40 \cdot L(\text{nH}) \cdot \Delta I$