

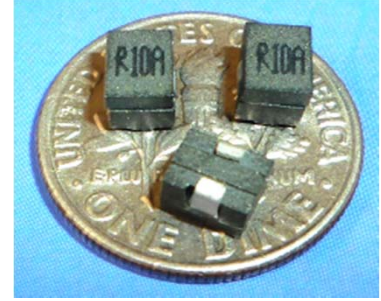


# SL16165 Series



## 1. Features:

- Ferrite based SMD Inductor with lower core loss.
- Inductance Range:65.0nH to 100.0nH,Custom values are welcomed.
- High current output chokes, upto 30.0 Amp with approx. 20% roll off.
- Low Profile 4.00mm Max. height .
- Foot Print 4.00 x 5.00 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 Qty: 2000 pcs , 13" Reel ;

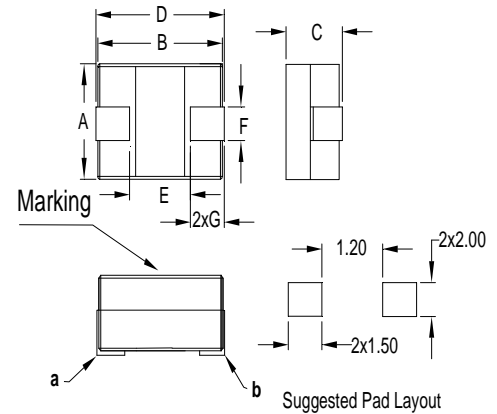


## 2. Electrical Characteristic of SL16165 Series:

Part Number	Inductance (nH) ±15% or 20%	DCR (mΩ) ± 10.0%	Inductance @Isat <sup>3</sup> (nH TYP)	Isat <sup>1</sup> (A) @25°C	Isat <sup>2</sup> (A) @75°C	Isat <sup>3</sup> (A) @100°C	Irms (A) @25°C
SL16165A-R06LHF	65.0 , 15%	0.330	60.00	30.00	27.00	25.00	30.00
SL16165A-R10MHF	100.0 , 20%	0.330	90.00	17.50	16.00	14.00	30.00

## 3. Mechanical Dimension(Unit:mm):

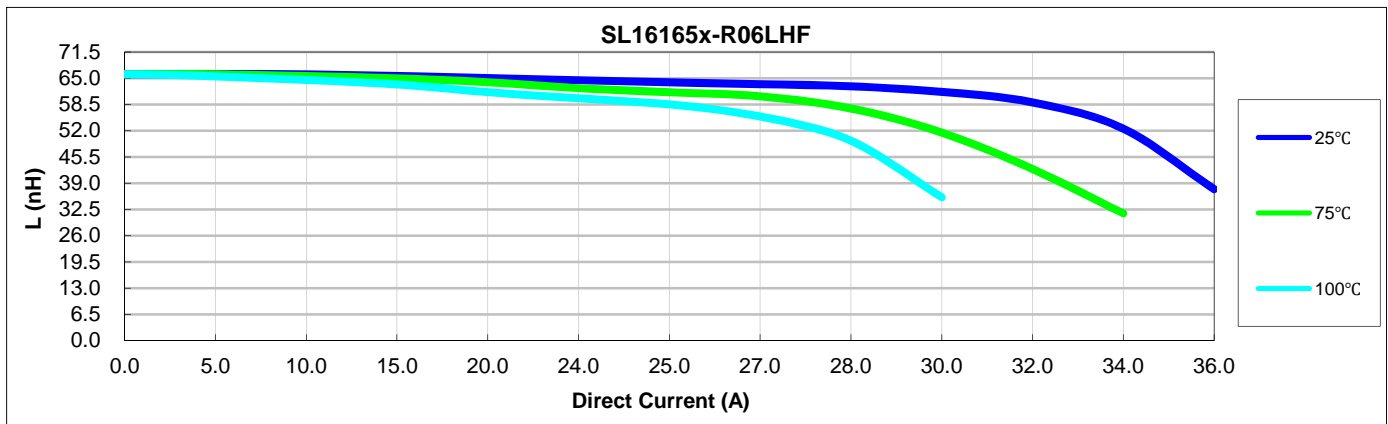
A	B	C	D	E	F	G
Max.	Max.	Max.	Max.	Nom.	Nom.	Nom.
5.00	3.90	4.00	4.00	1.60	1.40	1.00



### Note:

- 1>.Open Circuit Inductan
- 2>.Full Load Inductance (FLL) Test condition:100KHz,0.1Vrms ,Isat ;(Ta=25 °C).
- 3>.Isat<sup>1</sup>,Isat<sup>2</sup> & Isat<sup>3</sup> : 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):





# SL16165 Series

## Inductance vs. Current

