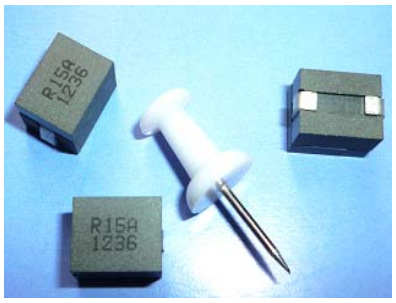
# SL4133 Series

## 1. Features:



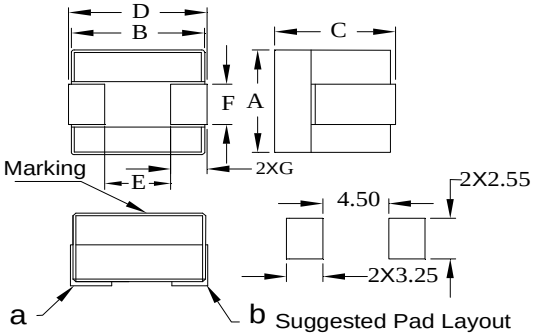

- Ferrite based SMD Inductor with lower core loss.
- Inductance Range:150nH to 170nH,Custom values are welcomed.
- High current output chokes, upto 79 Amp with approx. 20% roll off.
- Low Profile 8.40mm Max. height .
- Foot Print 10.41 x 8.00 mm Max.
- Ideal for Buck Converter, VRM & High Density Board Design.
- Operating frequency up to 1 MHz application.
- Operating Temperature Range -55°C to + 130°C , RoHs & HF compliance .

## 2. Electrical Characteristic of SL4133 Series:

| Part Number | Inductance (uH) ±10% | DCR (mΩ) ± 5.0% | Isat[1] (A) @25℃ | Isat[2] (A) @75℃ | Isat[3] (A) @100℃ | Irms (A) @25℃ |
|---|---|---|---|---|---|---|
| SL4133A-R15KHF | 0.150 | 0.120 | 79.00 | 73.00 | 68.00 | 67.00 |
| SL4133B-R15KHF | 0.150 | 0.145 | 79.00 | 73.00 | 68.00 | 61.00 |
| SL4133A-R17KHF | 0.170 | 0.120 | 72.00 | 63.00 | 59.00 | 67.00 |
| SL4133B-R17KHF | 0.170 | 0.145 | 72.00 | 63.00 | 59.00 | 61.00 |

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

| A Max. | B Max. | C Max. | D Max. | E Nom. | F Nom. | G Nom. |
|---|---|---|---|---|---|---|
| 8.00 | 10.30 | 8.40 | 10.41 | 5.10 | 2.25 | 2.50 |




**Note:**

1>.Open Circuit Inductance (OCL) test condition:100KHz,0.1Vrms,0Adc ,at 25℃.

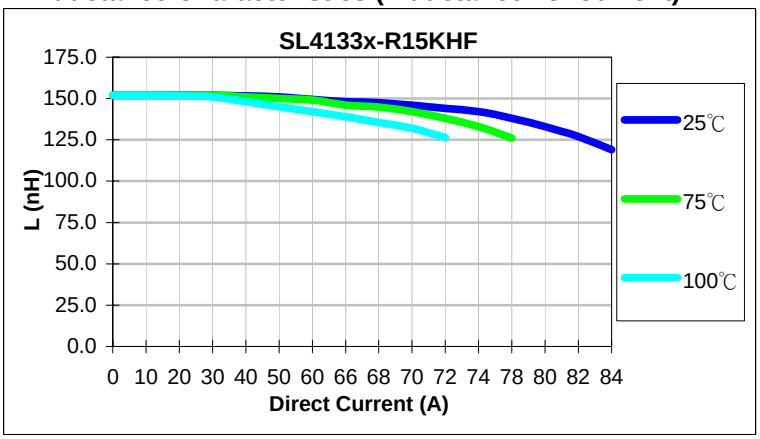
2>.Full Load Inductance (FLL) Test condition:100KHz,0.1Vrms ,Isat ;(Ta=25℃).

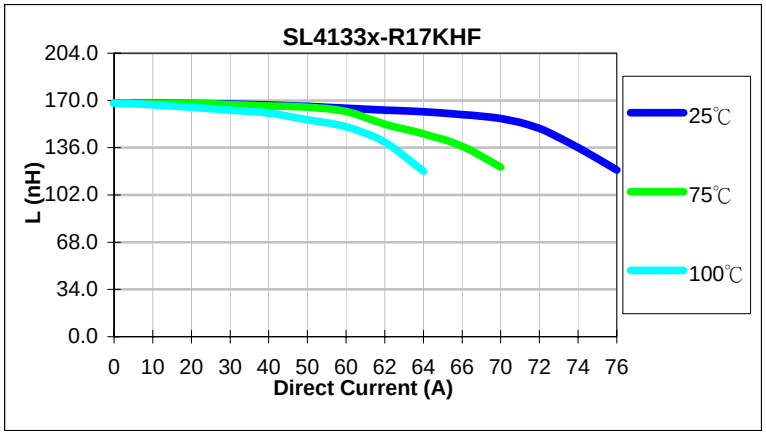
3>.Isat[1],Isat[2] & Isat[3] : DC current that will cause inductance to drops approximately by 20% ;

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):

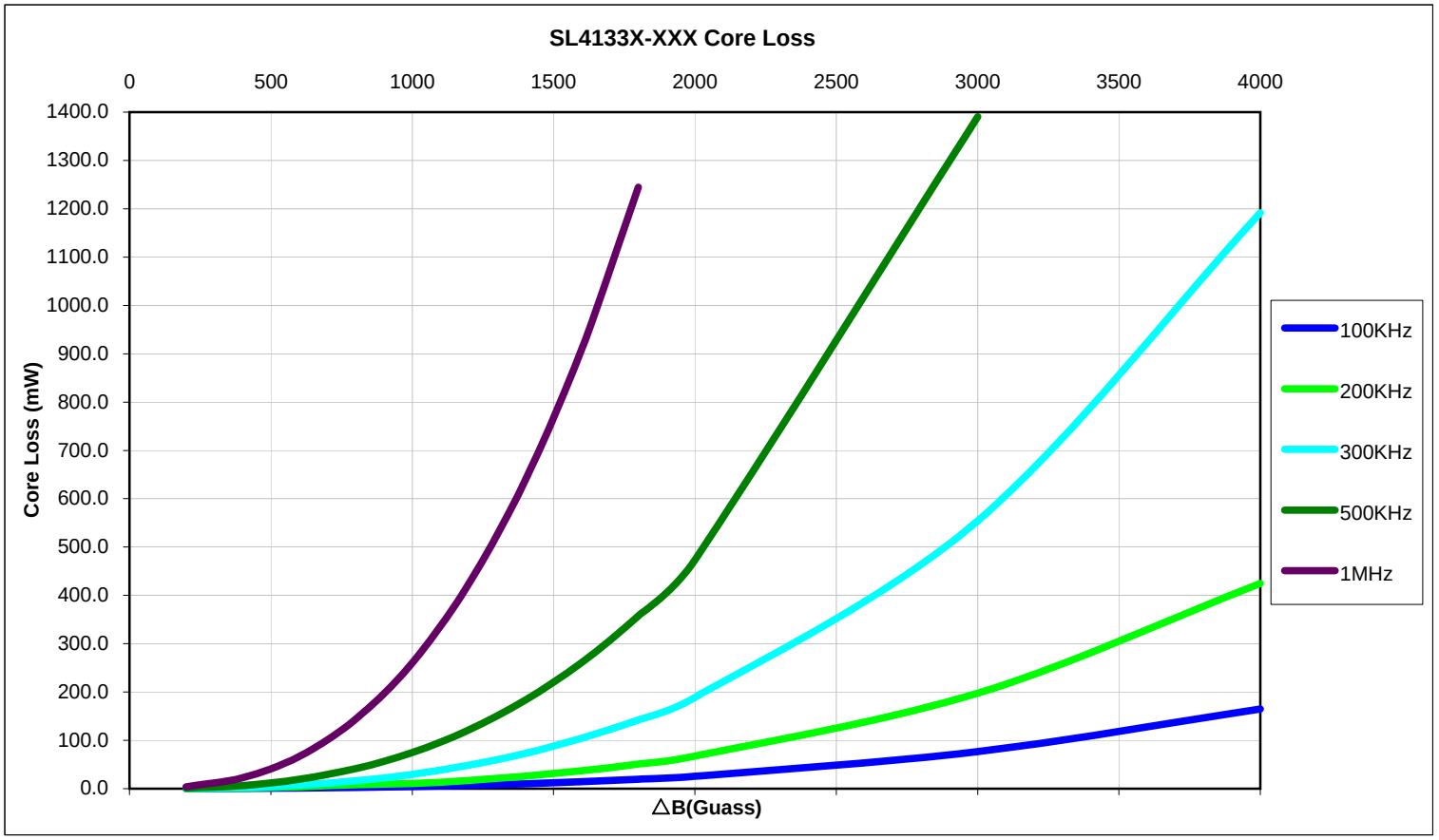



US 1 914 347 2474 ●Taiwan 886 972 022 388 ●Shenzhen 86 755 8418 6263 ●Shanghai 86 21 5424 5141 ●HK 852 9688 9767
Sales@inter-technical.com www.inter-technical.com , Rev.A, Sep.29, 2012

# SL4133 Series

**5. Core Loss:**




**Where △B=0.355*L(nH)*△I**