

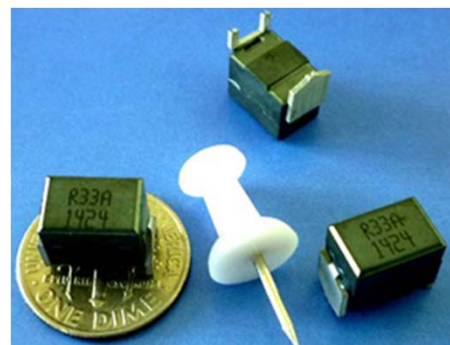


# SLD3740A Series



## 1. Features of SLD3740A Series:

- Ferrite based SMD Inductor with lower core loss.
- Custom values are welcomed.
- High current output chokes, up to 26.0 Amp with approx. 20% roll off.
- Low Profile 10.20mm maximum height.
- Foot Print 11.1x6.5mm maximum
- 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 compliant.

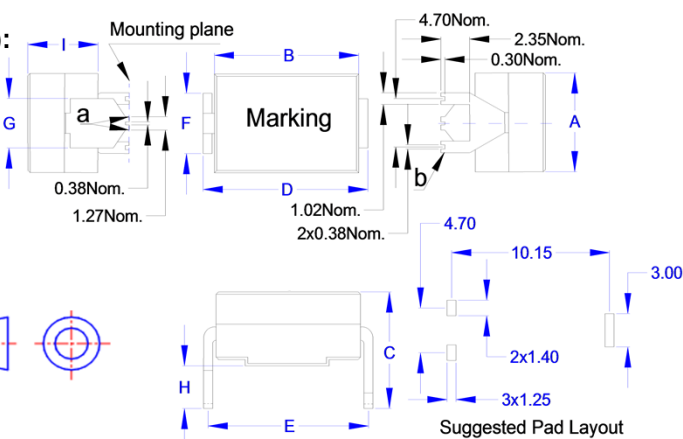


## 2. Electrical Characteristics of SLD3740A Series:

| Part Number     | OCL <sup>1</sup><br>(nH)<br>±10% or 15% | L@Isat <sup>4</sup><br>(nH)<br>Min. | DCR <sup>3</sup><br>(mΩ)<br>±5.0% | Isat1 <sup>4</sup><br>(A)<br>@25°C | Isat2 <sup>4</sup><br>(A)<br>@100°C | Irms <sup>5</sup><br>(A)<br>@25°C |
|-----------------|-----------------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-------------------------------------|-----------------------------------|
| SLD3740A-R10KHF | 100.00, 10%                             | 72.00                               | 0.29                              | 95.00                              | 85.00                               | 51.00                             |
| SLD3740A-R12KHF | 120.00, 10%                             | 86.40                               | 0.29                              | 81.00                              | 70.00                               | 51.00                             |
| SLD3740A-R15KHF | 150.00, 10%                             | 108.00                              | 0.29                              | 66.00                              | 56.00                               | 51.00                             |
| SLD3740A-R18KHF | 180.00, 10%                             | 129.60                              | 0.29                              | 55.00                              | 49.00                               | 51.00                             |
| SLD3740A-R22KHF | 220.00, 10%                             | 158.40                              | 0.29                              | 45.00                              | 41.00                               | 51.00                             |
| SLD3740A-R28KHF | 280.00, 10%                             | 201.60                              | 0.29                              | 35.00                              | 32.00                               | 51.00                             |
| SLD3740A-R30KHF | 300.00, 10%                             | 216.00                              | 0.29                              | 33.00                              | 30.00                               | 51.00                             |
| SLD3740A-R33LHF | 330.00, 15%                             | 237.60                              | 0.29                              | 26.00                              | 22.00                               | 51.00                             |
| SLD3740A-R39LHF | 390.00, 15%                             | 280.80                              | 0.29                              | 22.00                              | 19.00                               | 51.00                             |
| SLD3740A-R47LHF | 470.00, 15%                             | 338.40                              | 0.29                              | 18.00                              | 15.00                               | 51.00                             |

## 3. Mechanical Dimensions of SLD3740A Series (unit:mm):

| A    | B    | C     | D     | E     | F    | G    | H    | I    |
|------|------|-------|-------|-------|------|------|------|------|
| Max. | Max. | ±0.20 | Max.  | ±0.30 | Nom. | Nom. | Min. | Max. |
| 6.50 | 9.50 | 10.00 | 11.10 | 10.15 | 5.70 | 5.50 | 1.80 | 8.00 |



### Note:

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.
  4. Isat1, Isat2 : DC current that will cause inductance to drop by approximately 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, thickness, width, air-flow and proximity of other heat generating components as it will affect the temperature rise. It is recommended that the part temperature should not exceed 130°C under worst operating conditions
- New York 1 914 347 2474 ● Taipei 886 2 2698 8669 ● Kaohsiung 886 7 350 2275
- Tokyo 81 568 85 2830 ● Shenzhen 86 755 8418 6263 ● Shanghai 86 21 5424 5141 ● Hong Kong 852 9688 9767
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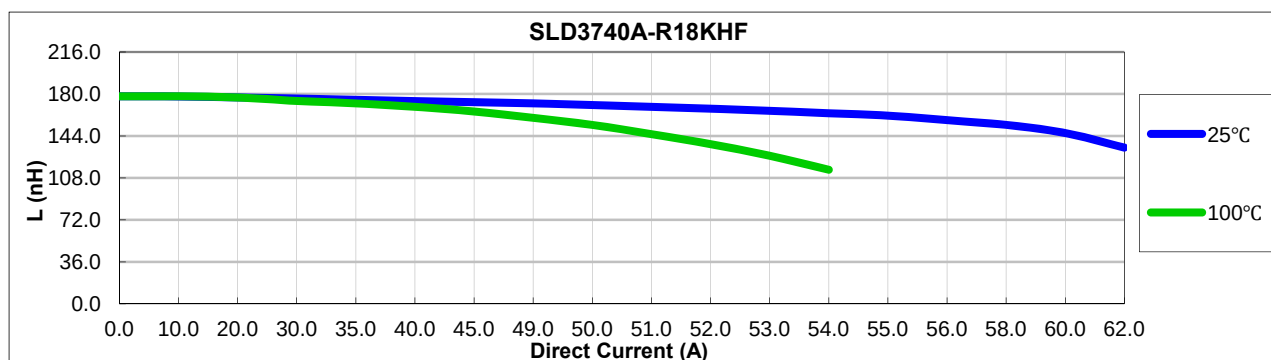
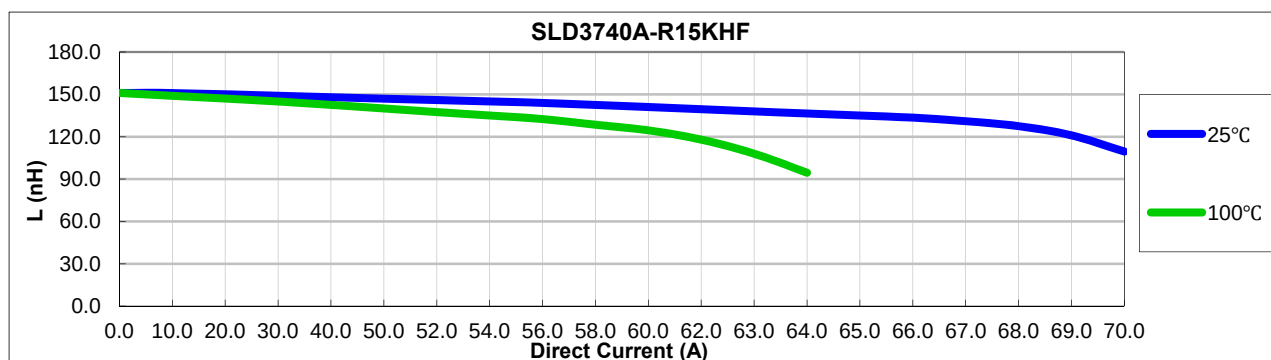
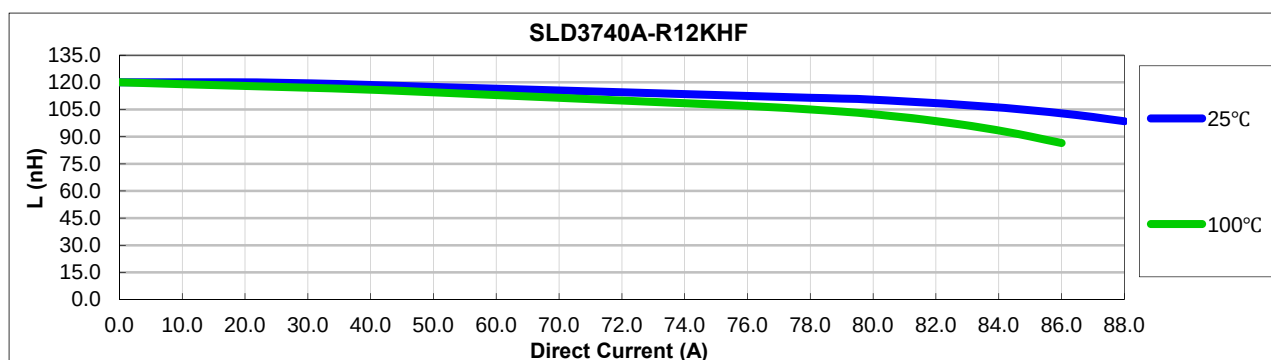
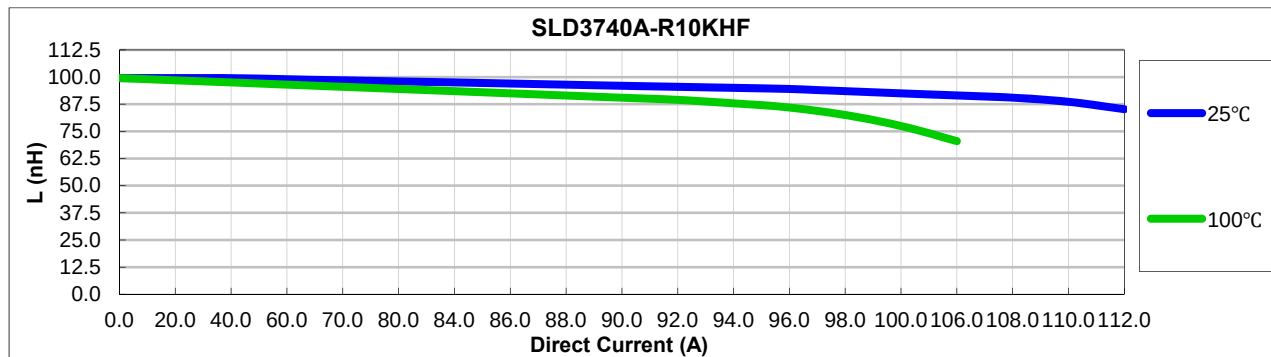
\*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.



# SLD3740A Series



## 4. Inductance Characteristics of SLD3740A (Inductance vs. Current):



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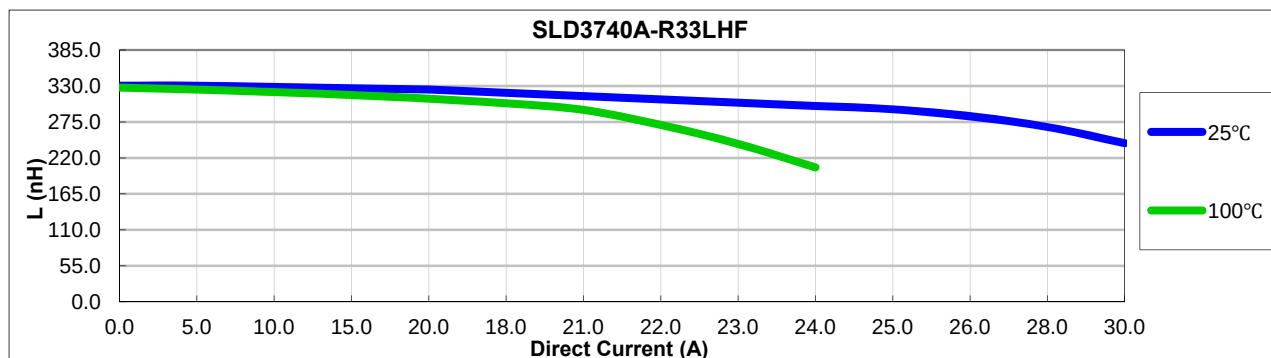
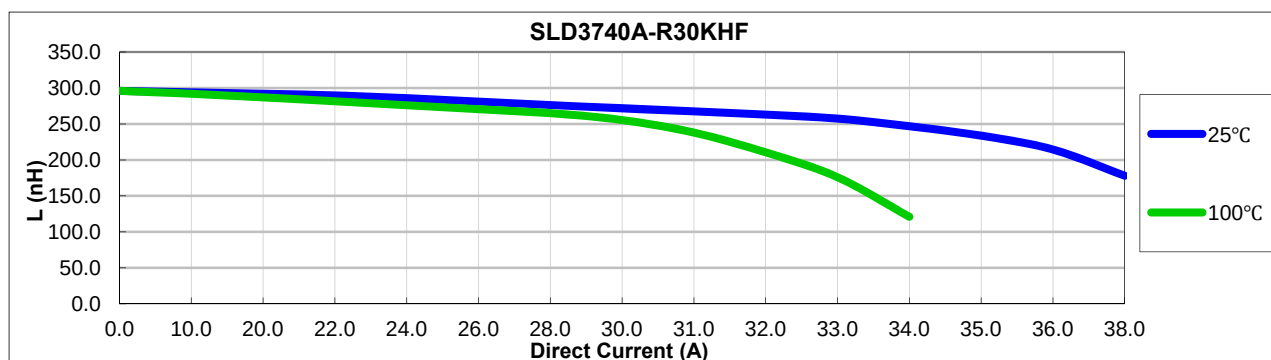
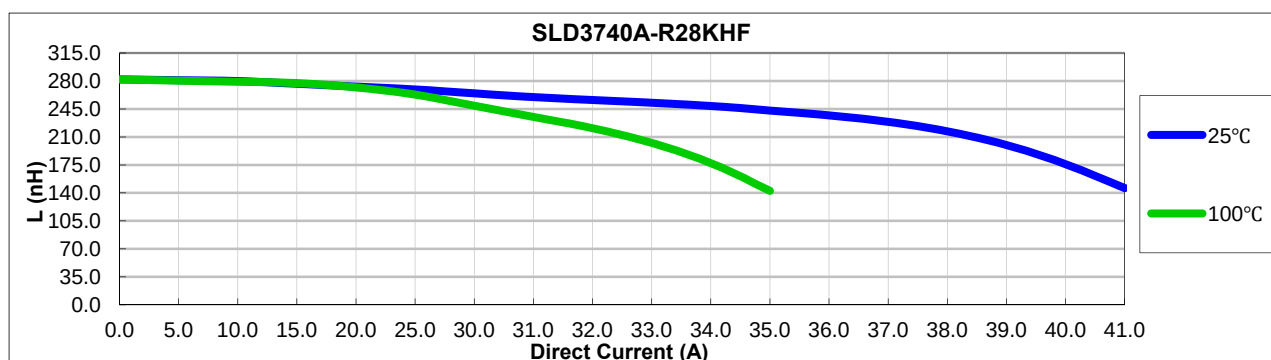
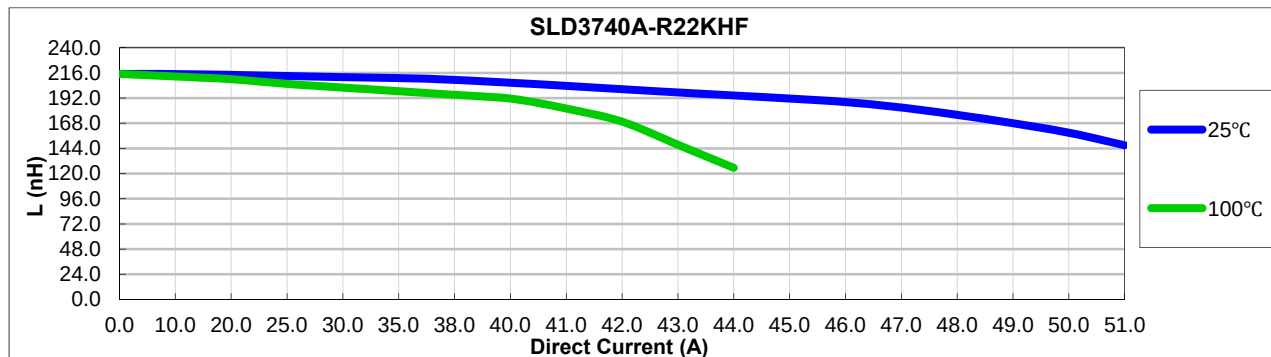
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# SLD3740A Series



## 4. Inductance Characteristics of SLD3740A Continuation (Inductance vs. Current):



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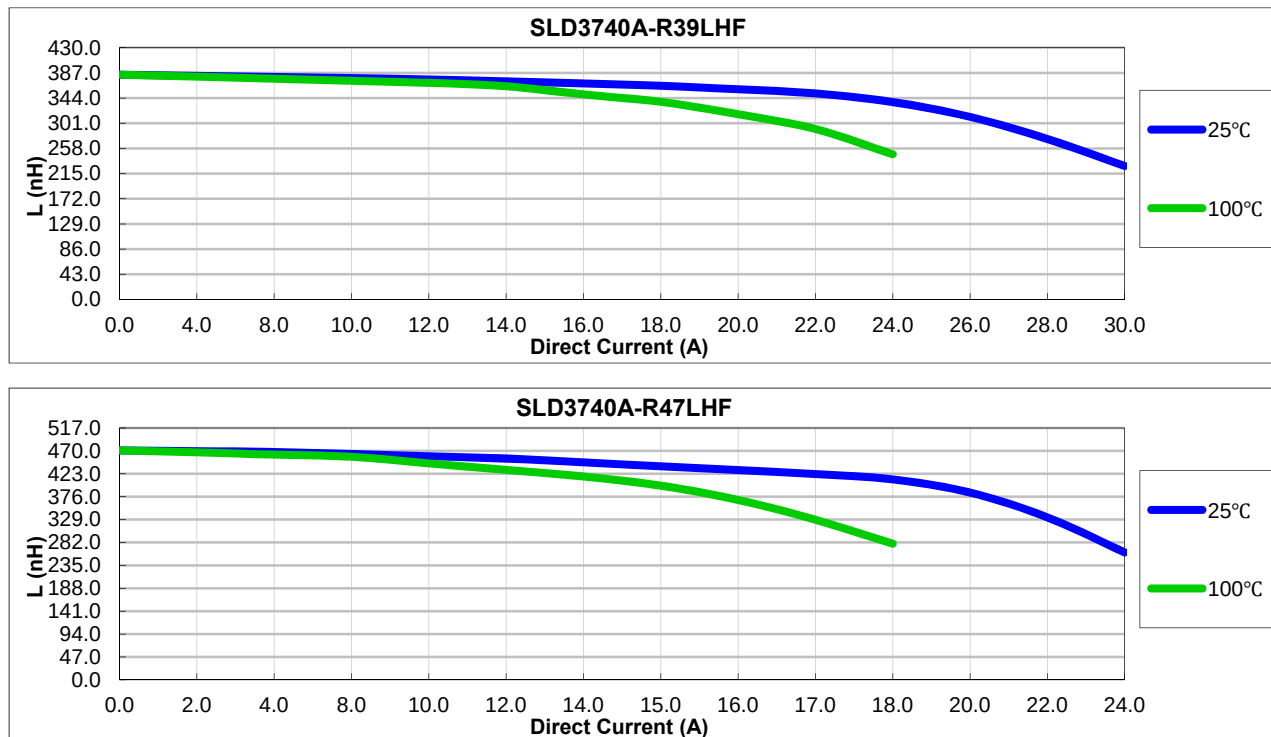
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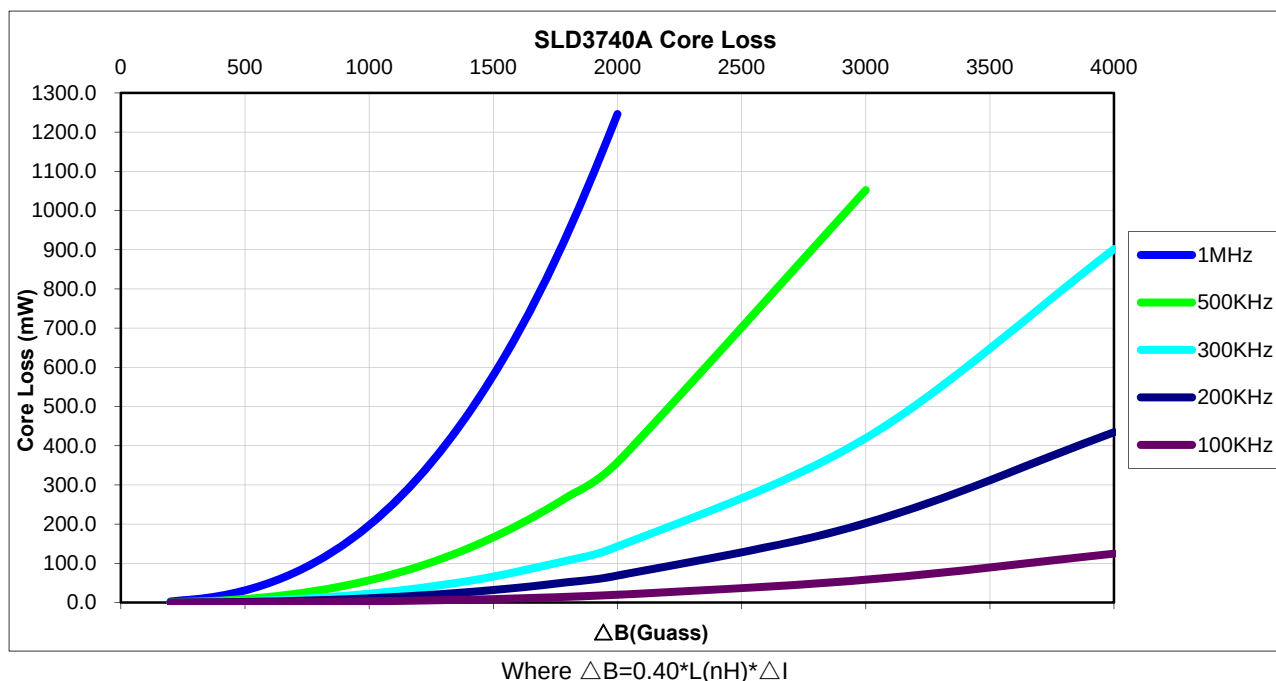
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## 4. Inductance Characteristics of SLD3740A Continuation (Inductance vs. Current):



## 5. Core Loss of SLD3740A:



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