

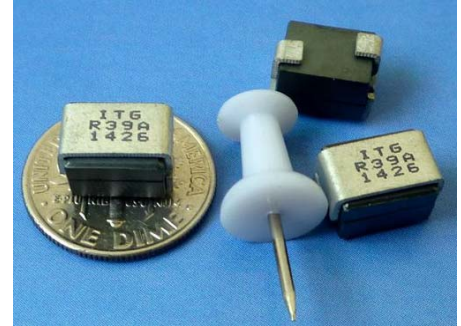


# SLM40327 Series



## 1. Features:

- Ferrite based SMD inductor with lower core loss.
- Inductance range: 180.0 nH to 1,390.0 nH , custom values are welcomed.
- High current output chokes, upto 85.0 Amp with approx. 20% roll off.
- Low profile 8.00 mm Max. height.
- 10.00 x 7.00 mm Foot Print.
- 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: 450 pcs ,13" Reel.

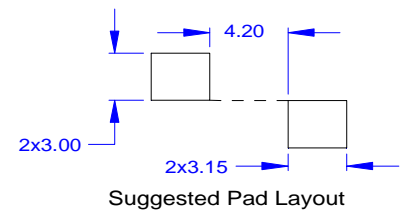
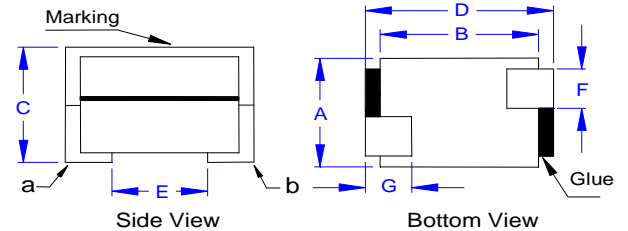


## 2. Electrical Characteristic of SLM40327 Series:

| ITG Part Number  | OCL <sup>1</sup><br>(nH)<br>± 20% | L @ Isat1 <sup>2</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 | Isat3 <sup>4</sup><br>(A)<br>@100°C | Irms <sup>5</sup><br>(A)<br>@25°C |
|------------------|-----------------------------------|--|------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|
| SLM40327A-R18KHf | 180.00                            | 129.60                                 | 0.85                               | 85.00                              | 79.00                               | 75.00                               | 30.00                             |
| SLM40327A-R22MHf | 220.00                            | 158.40                                 | 0.85                               | 70.00                              | 63.00                               | 59.00                               | 30.00                             |
| SLM40327A-R28MHf | 280.00                            | 201.60                                 | 0.85                               | 57.00                              | 52.00                               | 48.00                               | 30.00                             |
| SLM40327A-R36KHf | 360.00                            | 259.20                                 | 0.85                               | 43.00                              | 39.00                               | 36.00                               | 30.00                             |
| SLM40327A-R39MHf | 405.00                            | 291.60                                 | 0.85                               | 38.00                              | 36.00                               | 32.00                               | 30.00                             |
| SLM40327A-R47MHf | 475.00                            | 342.00                                 | 0.85                               | 32.00                              | 30.00                               | 27.00                               | 30.00                             |
| SLM40327A-R53MHf | 530.00                            | 381.60                                 | 0.85                               | 28.00                              | 26.00                               | 24.00                               | 30.00                             |
| SLM40327A-R72MHf | 728.00                            | 524.16                                 | 0.85                               | 20.00                              | 18.00                               | 17.00                               | 30.00                             |
| SLM40327A-R82MHf | 835.00                            | 601.20                                 | 0.85                               | 16.00                              | 14.50                               | 14.00                               | 30.00                             |
| SLM40327A-1R0MHf | 950.00                            | 684.00                                 | 0.85                               | 14.00                              | 13.00                               | 12.50                               | 30.00                             |
| SLM40327A-1R4MHf | 1390.00                           | 1000.80                                | 0.85                               | 8.00                               | 7.50                                | 7.00                                | 30.00                             |

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

| A<br>(Max.) | B<br>(Max.) | C<br>(Max.) | D<br>(Max.) | E<br>(Nom.) | F<br>± 0.20 | G<br>± 0.30 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 7.00        | 8.70        | 8.00        | 10.00       | 4.75        | 2.50        | 2.50        |



### Notes:

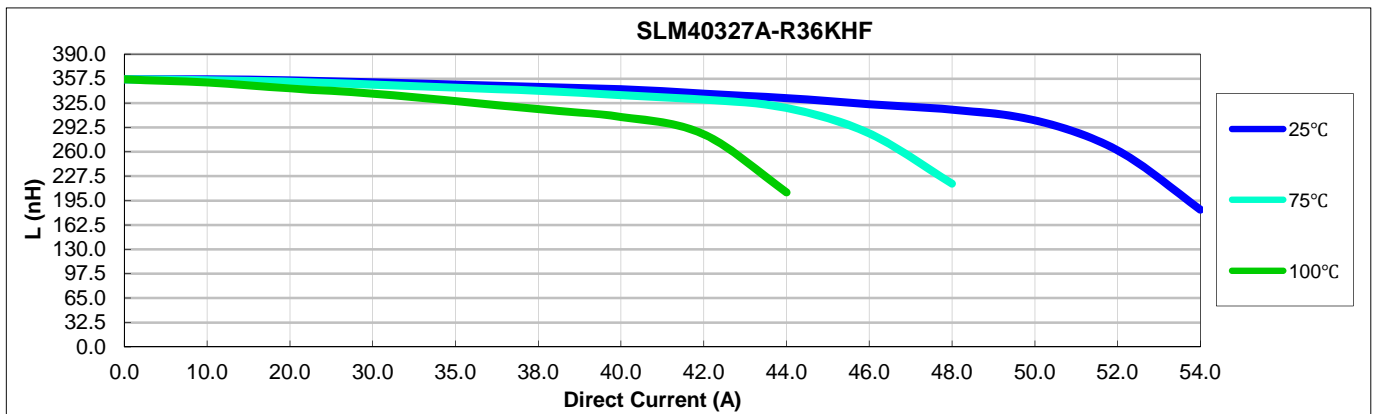
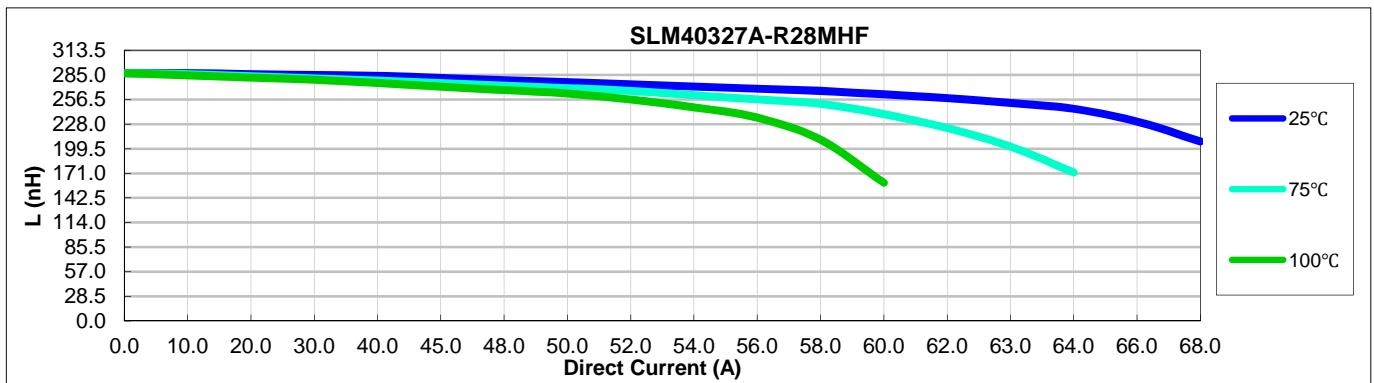
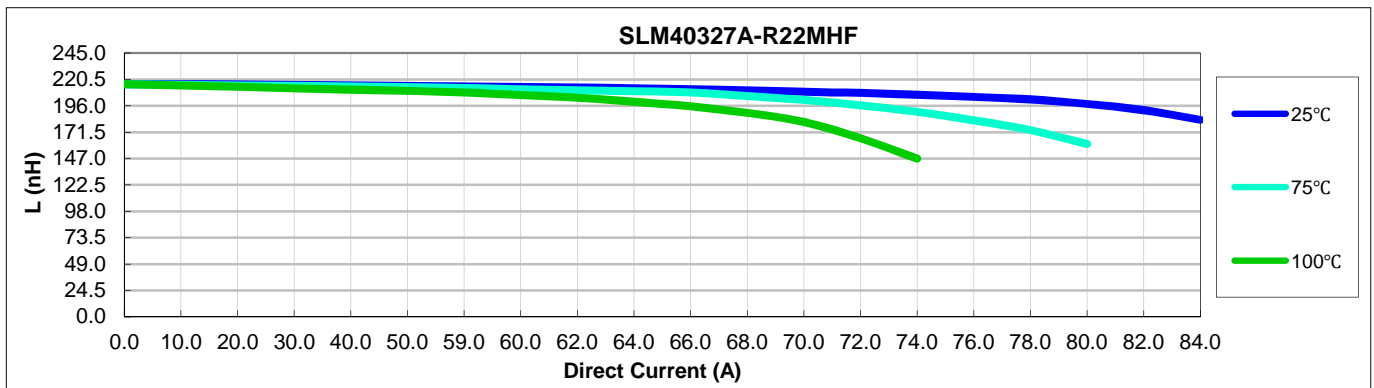
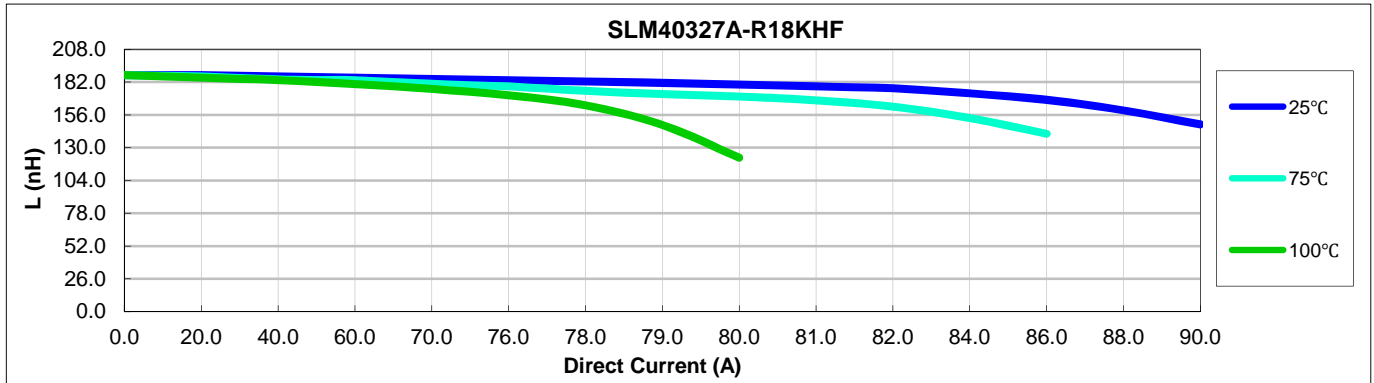
- 1> Open Circuit Inductance (OCL) test condition: 100KHz, 0.1Vrms, 0Adc at 25°C.
- 2> L @ Isat and L @ Irms test condition: 100KHz, 0.1Vrms (Ta=25°C).
- 3> The nominal DCR is measured from point" a " to point" b ", as shown above on the mechanical drawing (Ta=25°C).
- 4> Isat1,Isat2 & Isat3 : DC current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



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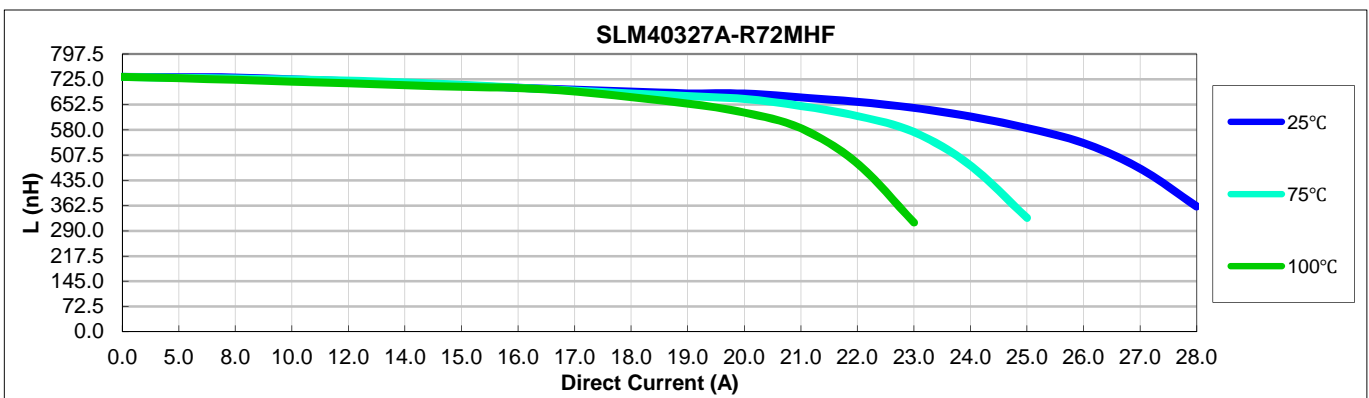
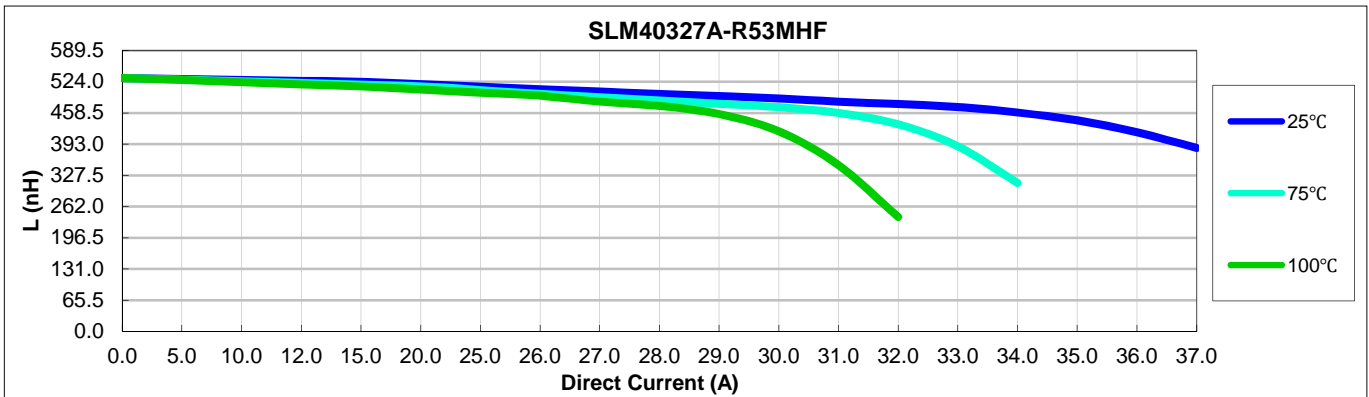
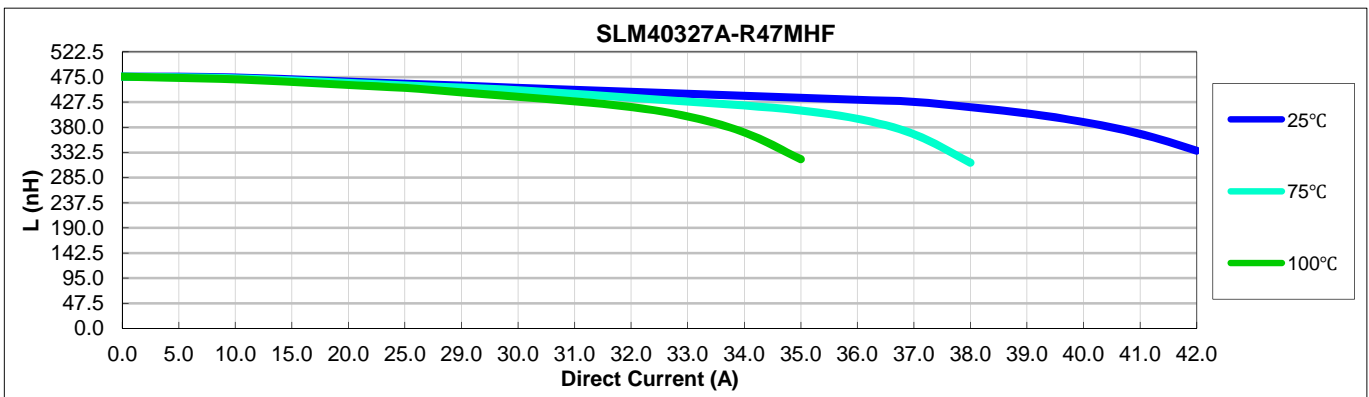
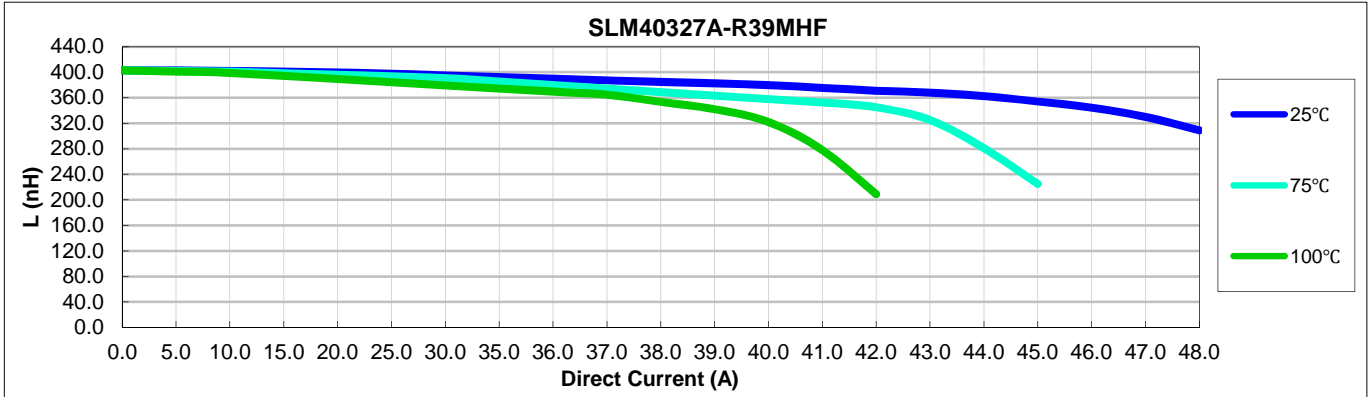
## 4. Inductance Characteristics (Inductance vs. Current):





# SLM40327 Series

## Inductance vs. Current





# SLM40327 Series

## Inductance vs. Current

