

AFA3732 Series



1. Features of AFA3732 Series :

- Ferrite based SMD inductor with lower core loss.
- Inductance Range: 40.0nH to 300.0nH, Custom values are welcomed.
- High current output chokes, up to 210.0 Amp with approx. 20% roll off.
- Low Profile 8.00 mm Max. height .
- Foot Print 9.60 x 6.40 mm Max .
- Perfect for high density designs with limited board space.
- Operating frequency up to 5.0 MHz application.
- Operating Temperature Range -55° C to + 130° C , RoHs & HF compliance .
- T & R Qty: 600 pcs , 13" Reel ;

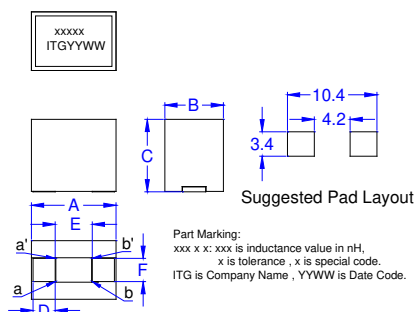


2. Electrical Characteristic of AFA3732 Series:

| ITG Part Number | OCL ¹ (nH) ± 15% | L @ Isat ² (nH) Min. | DCR ³ (mΩ) ± 5% | Isat1 ⁴ (A) @25°C | Isat2 ⁴ (A) @75°C | Isat3 ⁴ (A) @100°C | Irms ⁵ (A) @25°C |
|-----------------|-----------------------------------|---------------------------------------|----------------------------------|------------------------------------|------------------------------------|-------------------------------------|-----------------------------------|
| AFA3732A-40L | 40.00 | 28.80 | 0.145 | 210.00 | 190.00 | 180.00 | 75.00 |
| AFA3732A-50L | 50.00 | 36.00 | 0.145 | 185.00 | 175.00 | 160.00 | 75.00 |
| AFA3732A-60L | 60.00 | 43.20 | 0.145 | 155.00 | 150.00 | 140.00 | 75.00 |
| AFA3732A-70L | 70.00 | 50.40 | 0.145 | 124.00 | 120.00 | 115.00 | 75.00 |
| AFA3732A-80L | 80.00 | 57.60 | 0.145 | 118.00 | 110.00 | 102.00 | 75.00 |
| AFA3732A-100L | 100.00 | 72.00 | 0.145 | 95.00 | 88.00 | 82.00 | 75.00 |
| AFA3732A-120L | 120.00 | 86.40 | 0.145 | 78.00 | 71.00 | 67.00 | 75.00 |
| AFA3732A-150L | 150.00 | 108.00 | 0.145 | 60.00 | 54.00 | 52.00 | 75.00 |
| AFA3732A-180L | 180.00 | 129.60 | 0.145 | 50.00 | 48.00 | 46.00 | 75.00 |
| AFA3732A-220L | 220.00 | 158.40 | 0.145 | 38.00 | 36.00 | 34.00 | 75.00 |
| AFA3732A-270L | 270.00 | 194.40 | 0.145 | 30.00 | 28.00 | 26.00 | 75.00 |
| AFA3732A-300L | 300.00 | 216.00 | 0.145 | 26.00 | 24.00 | 22.00 | 75.00 |

3. Mechanical Dimension(Unit : mm):

| A | B | C | D | E | F |
|------|------|------|--------|------|--------|
| Max. | Max. | Max. | ± 0.35 | Nom. | ± 0.20 |
| 9.60 | 6.40 | 8.00 | 2.35 | 4.70 | 2.80 |



Notes:

1. Open Circuit Inductance (OCL) test condition:500KHz,0.25Vrms,0A_{dc} ,at 25 °C.
2. L @ Isat and L @ Irms Test condition:500KHz,0.25Vrms (Ta=25 °C).
3. The nominal DCR is measured from point "a" and "a" to point "b" and "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 verified in the end application.



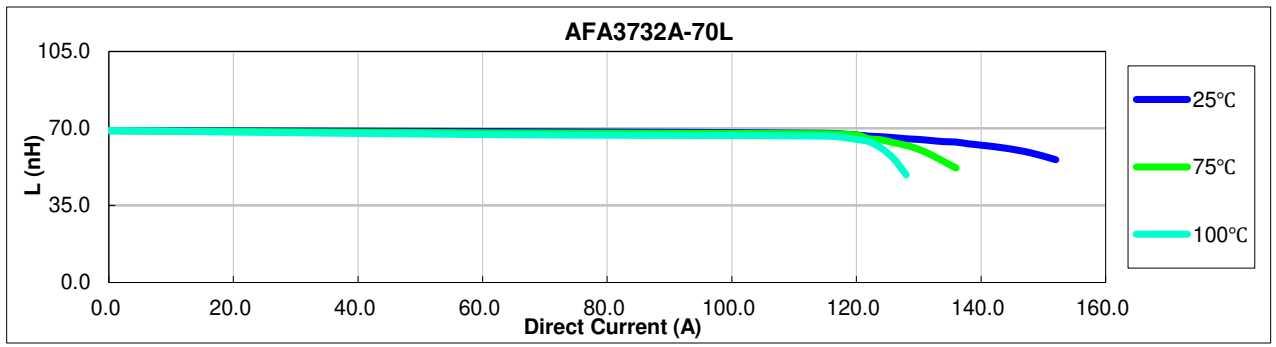
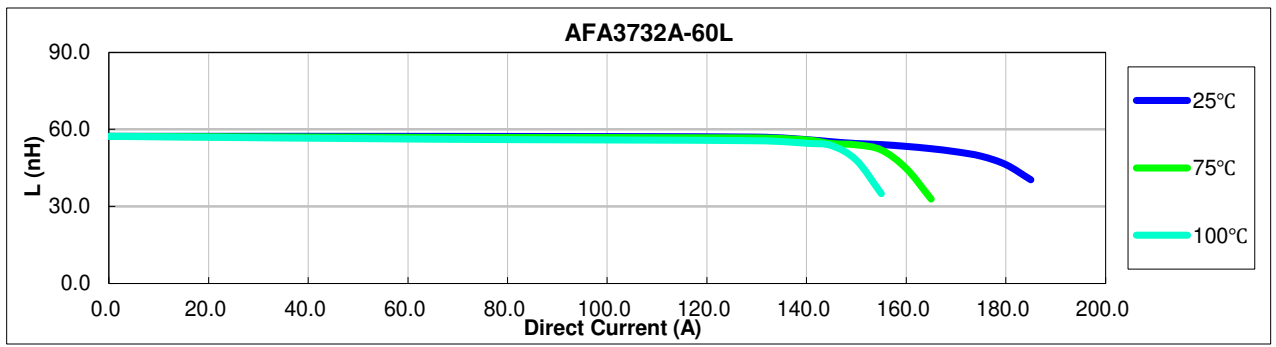
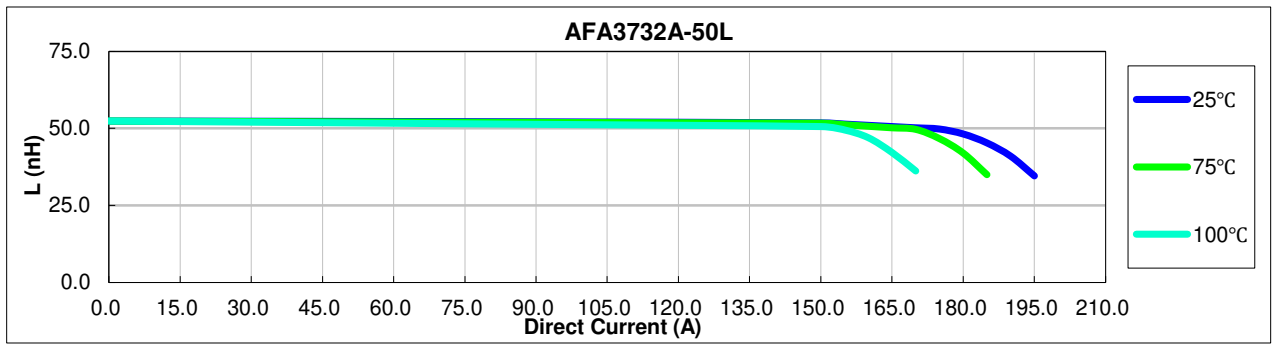
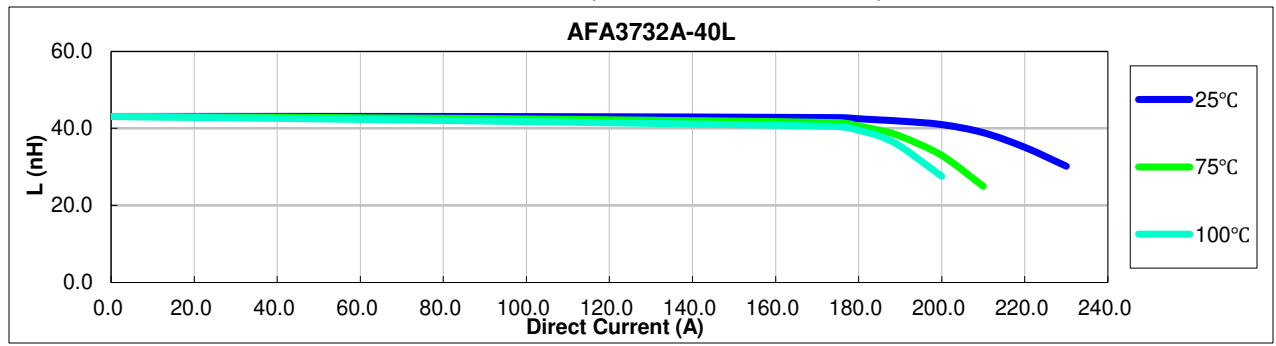


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Halogen Free

4. Inductance Characteristics of AFA3732 Series (Inductance vs Current):

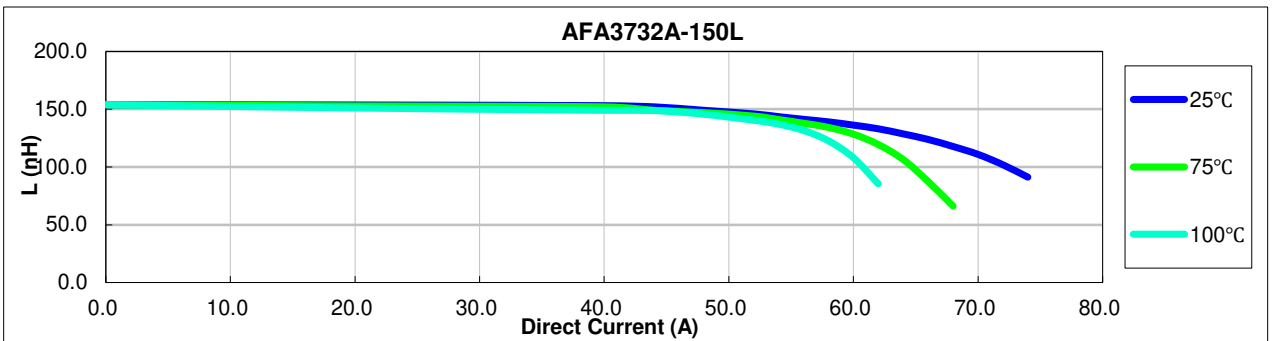
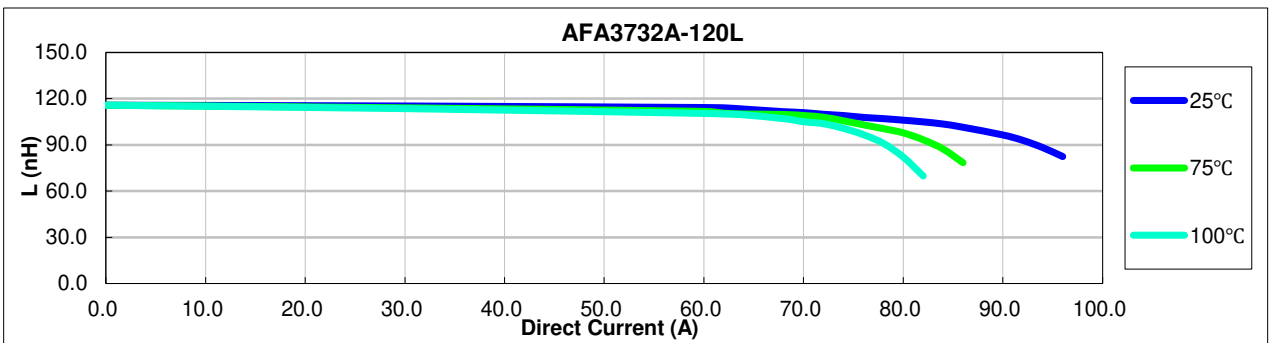
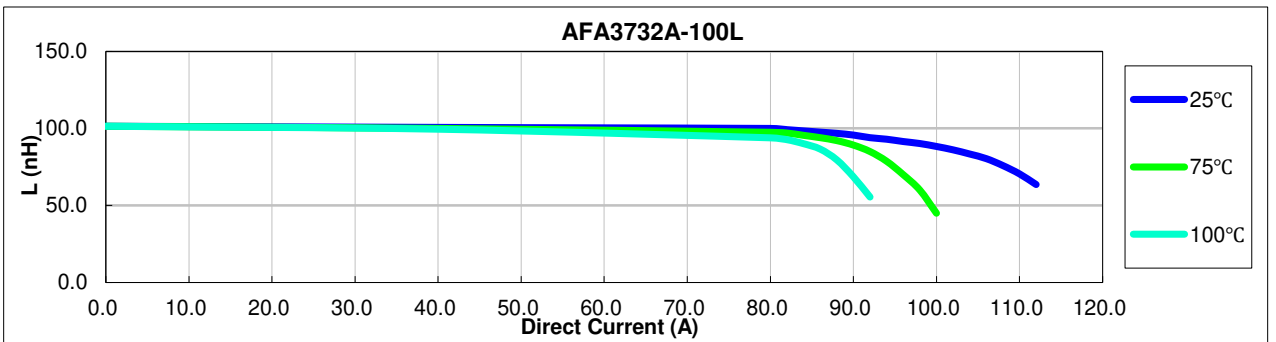
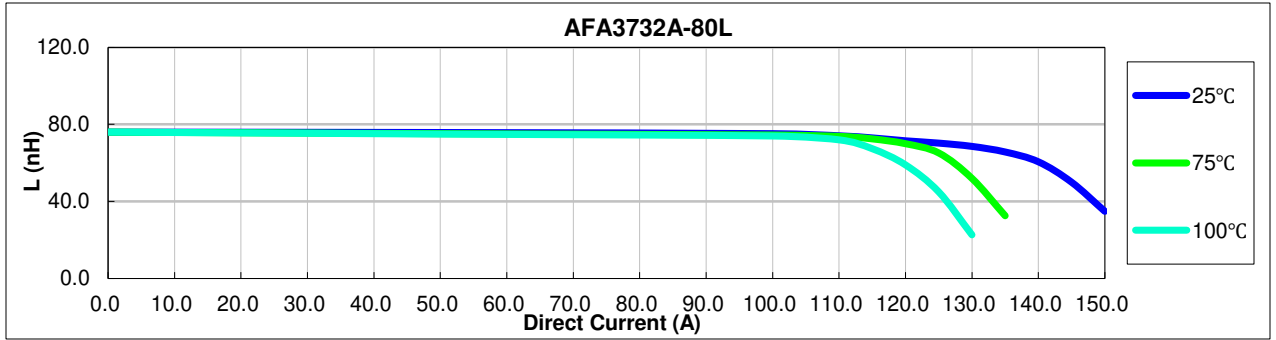


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*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.



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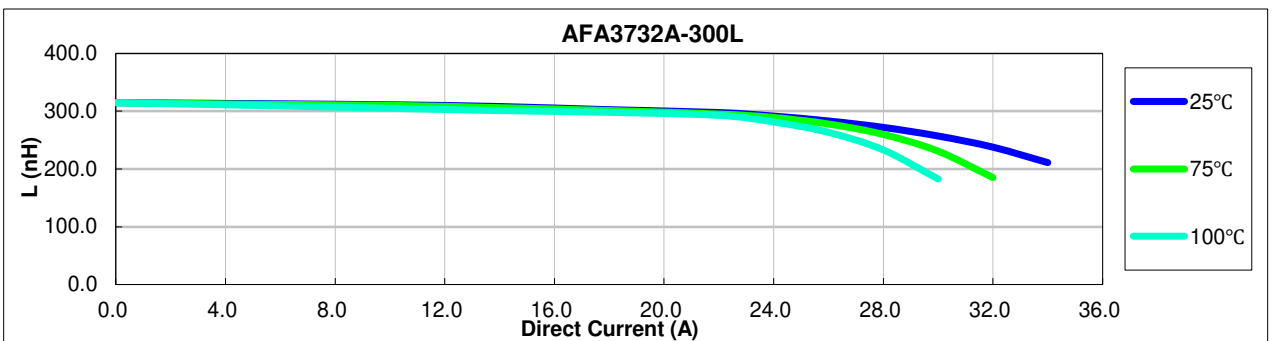
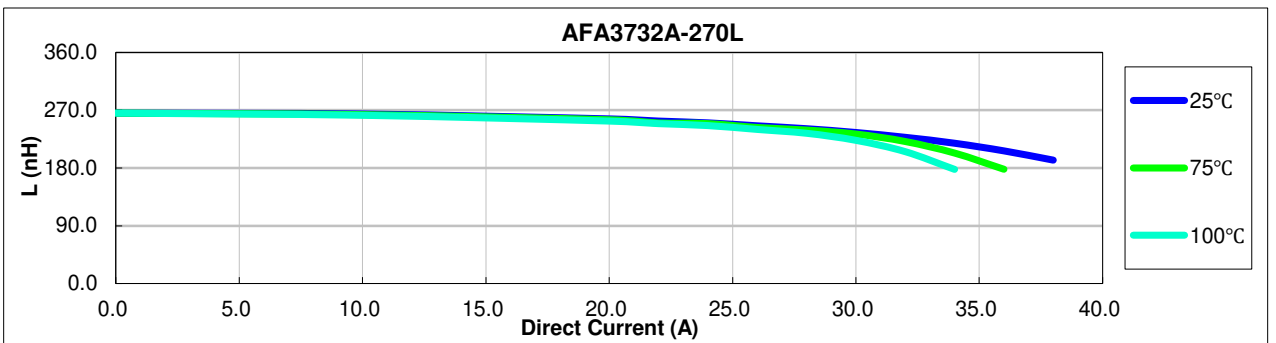
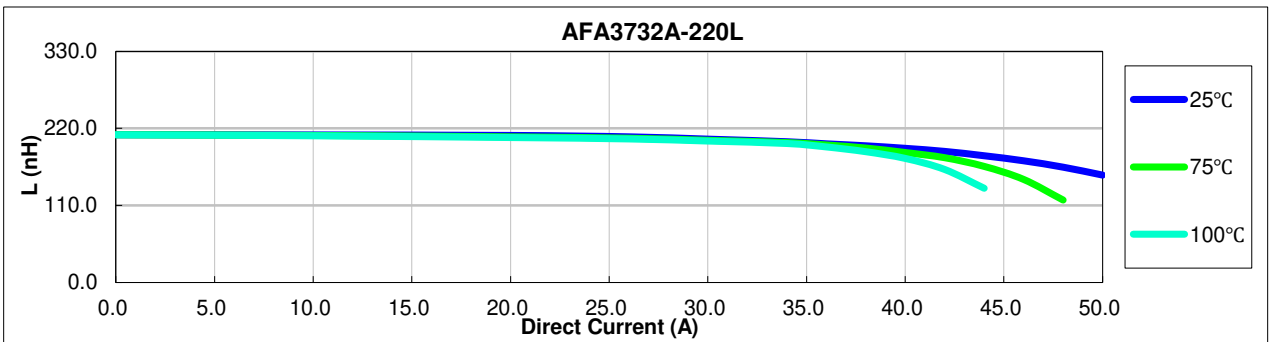
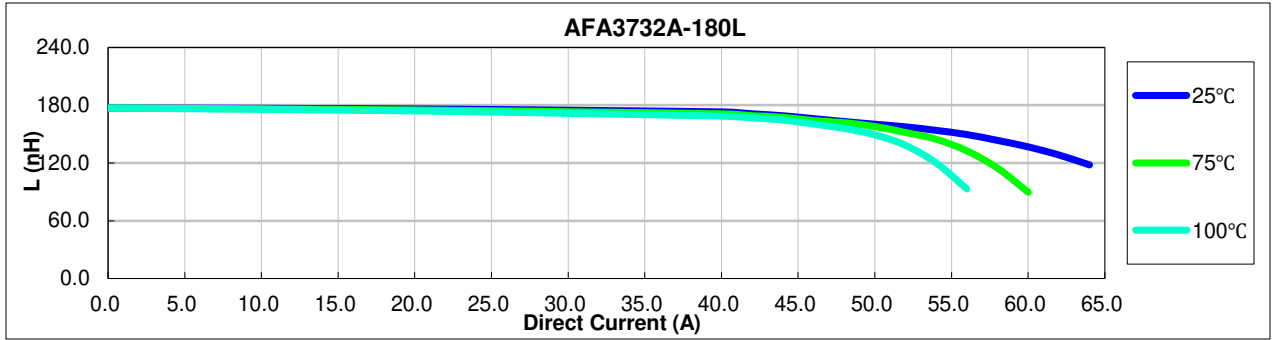


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