



AH4730 Series



1. Features of AH4730 Series:

- Ferrite based SMD inductor with lower core loss.
- Inductance range: 190nH to 400nH , custom values are welcomed.
- High current output chokes of up to 70.0 Amp with approx. 20% roll off.
- Low profile 7.5mm maximum height
- 12.10 x 10.00mm foot print.
- Ideal for Buck Converter, VRM & High Density Board Design.
- Operating frequency of up to 5.0 MHz
- Operating temperature range of -55° C to + 130° C.
- RoHS & HF compliant.
- T & R Quantity: 500pcs, 13"Reel



2. Electrical Characteristics of AH4730 Series:

Part Number	Inductance (uH) ±10%	DCR (mΩ) ± 7%	Isat ¹ (A) @25°C	Isat ² (A) @45°C	Isat ³ (A) @100°C	Irms ⁴ (A) @25°C
AH4730-R19KHF	0.19	0.48	70.0	68.0	66.0	42.0
AH4730-R24KHF	0.24	0.48	64.0	59.0	54.0	42.0
AH4730-R27KHF	0.27	0.48	55.0	54.0	50.0	42.0
AH4730-R30KHF	0.30	0.48	46.0	45.0	41.0	42.0
AH4730-R40KHF	0.40	0.48	30.0	29.0	28.0	42.0
AH4730-R51KHF	0.51	0.48	27.0	24.0	23.0	42.0

3. Mechanical Dimension of AH4730 Series:

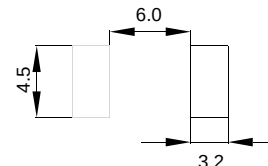
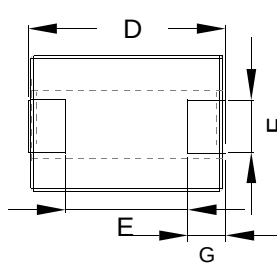
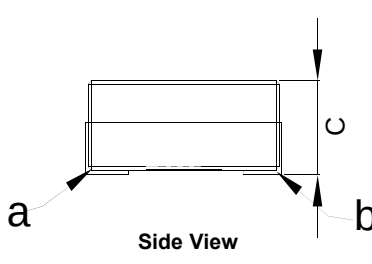
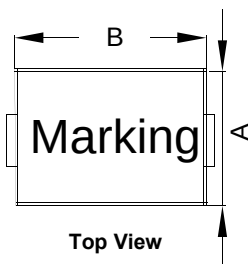
A Max.	B Max.	C Max.	D Max.	E Nom.	F Nom.	G Nom.
10.0	11.7	7.5	12.1	7.0	3.8	2.5

Third Angle Projection:



Part Marking:

xxxxX: xxxx is inductance value in uH (R:decimal point) X is part code
ITGYYWW: ITG: Company name, YYWW: Date code.



Suggested Pad Layout

Notes:

1. Open Circuit Inductance (OCL) test condition: 500KHz, 0.25Vrms, 0A DC at 25°C.
2. Full Load Inductance (FLL) Test condition: 500KHz, 0.25Vrms, Isat; (Ta=25°C).
3. The nominal DCR is measured from point "a" to point "b" as shown above in the mechanical drawing.
4. Isat1, Isat2 and 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.
6. Derating is necessary for AC currents. Verify and check PCB pad layout, trace thickness, width, air-flow and proximity of other heat generating components as it will have an effect on the temperature rise.
7. 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
 ● Japan 81 568 85 2830 ● Shenzhen 86 755 8418 6263 ● Shanghai 86 21 5424 5141 ● Hong Kong 852 9688 9767
 ● sales@ITG-Electronics.com ● www.ITG-Electronics.com Revision E: June 28 , 2016

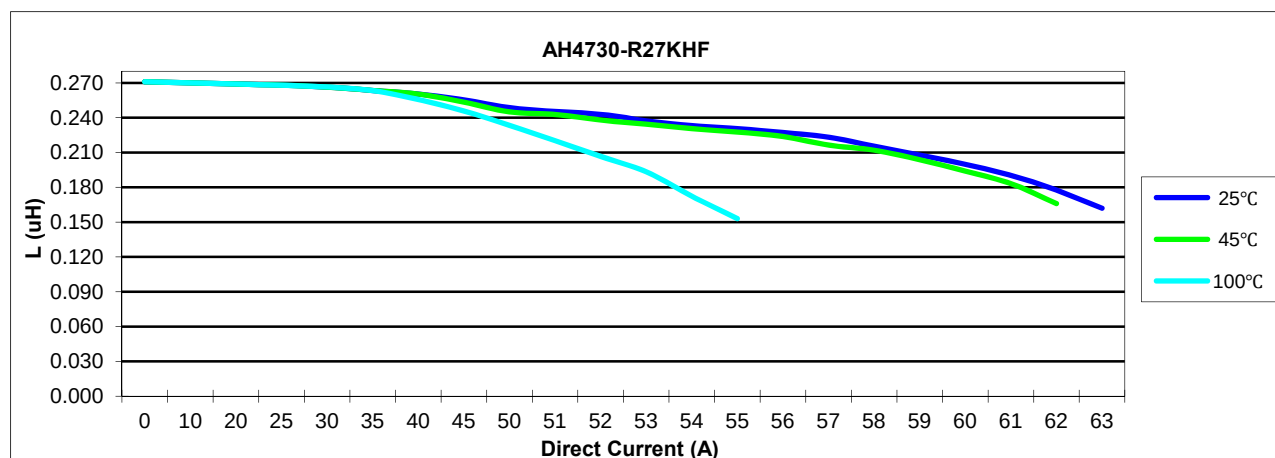
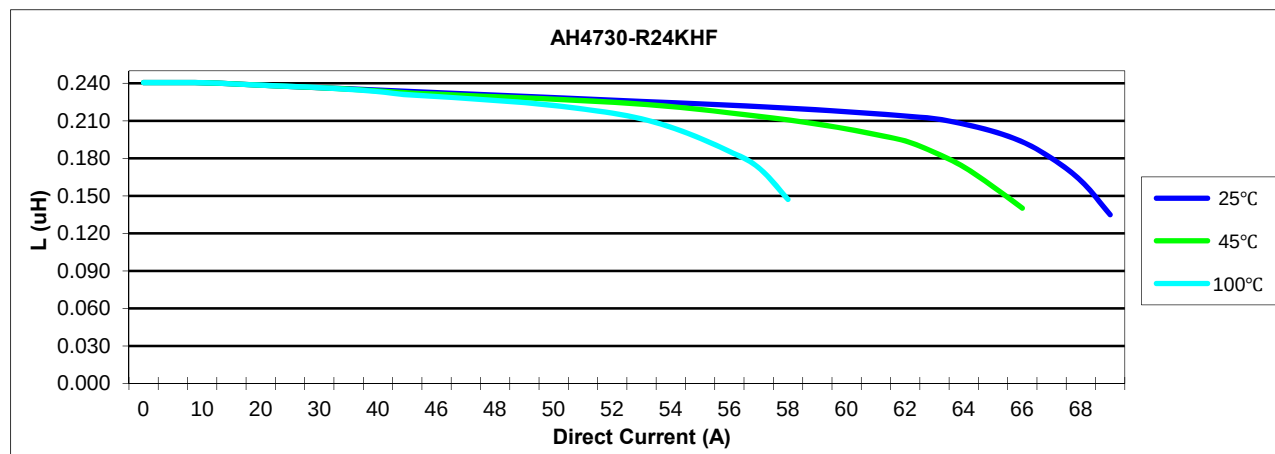
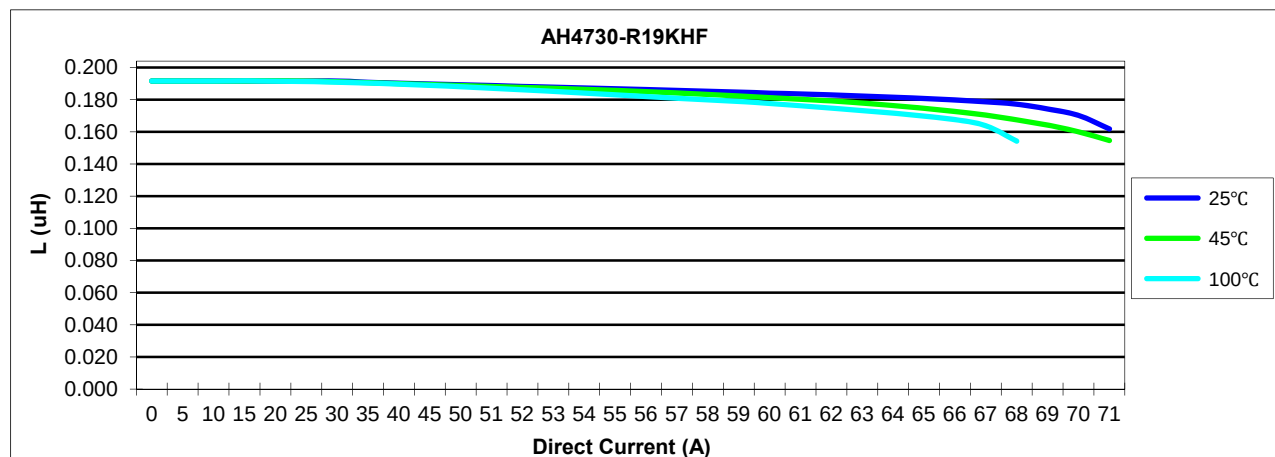
*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.



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4. Inductance Characteristics of AH4730 Series (Inductance vs Current):



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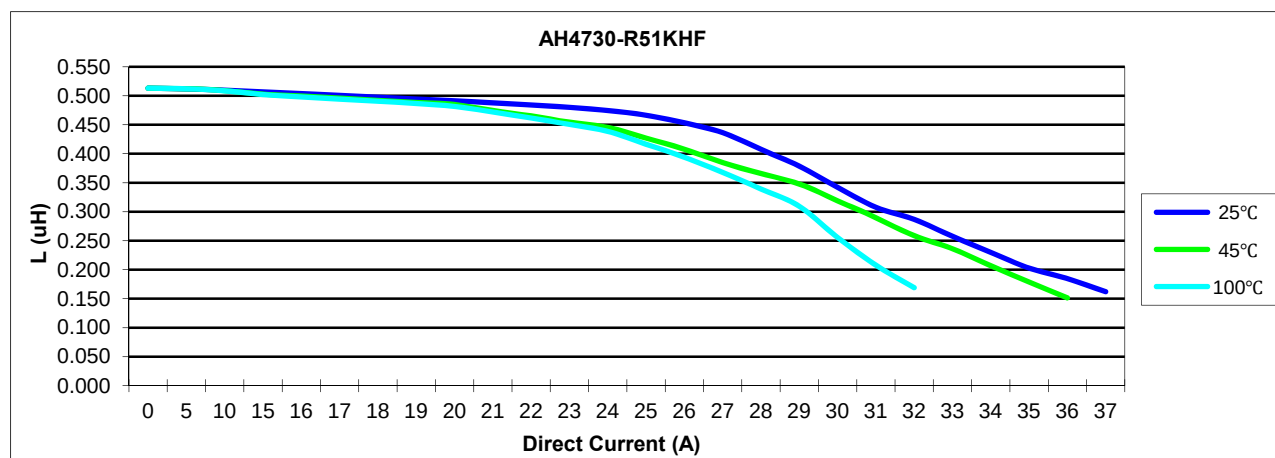
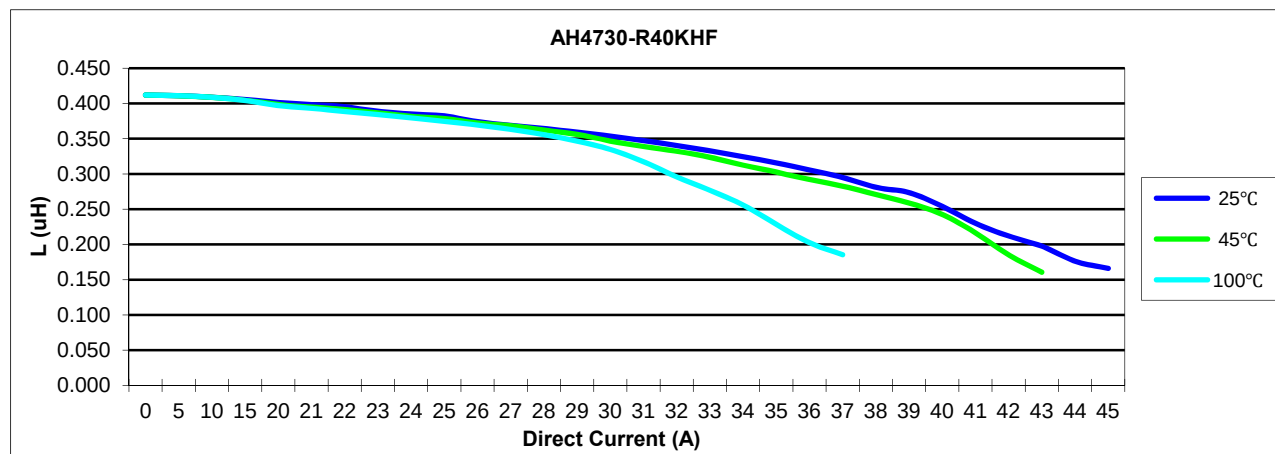
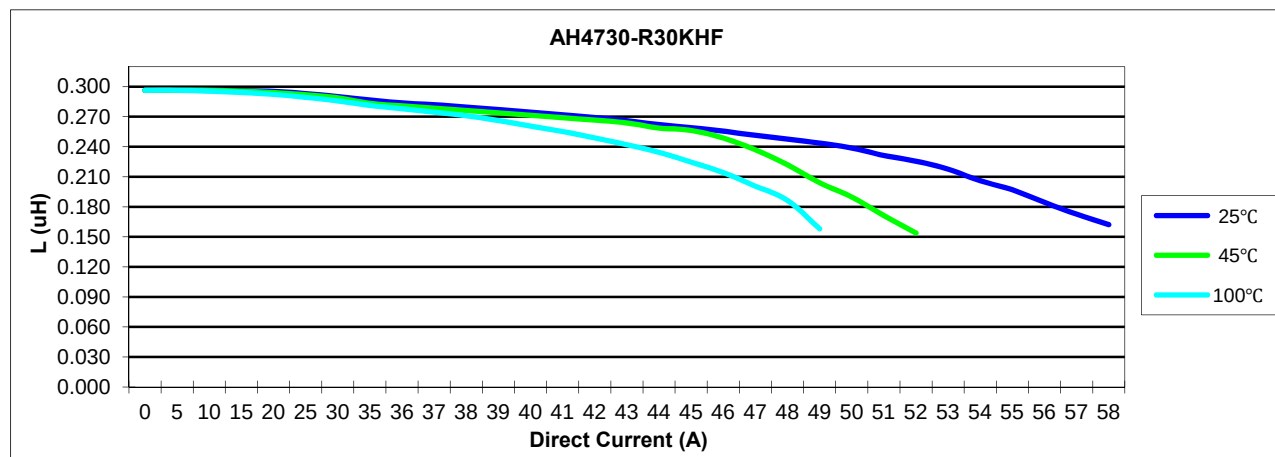
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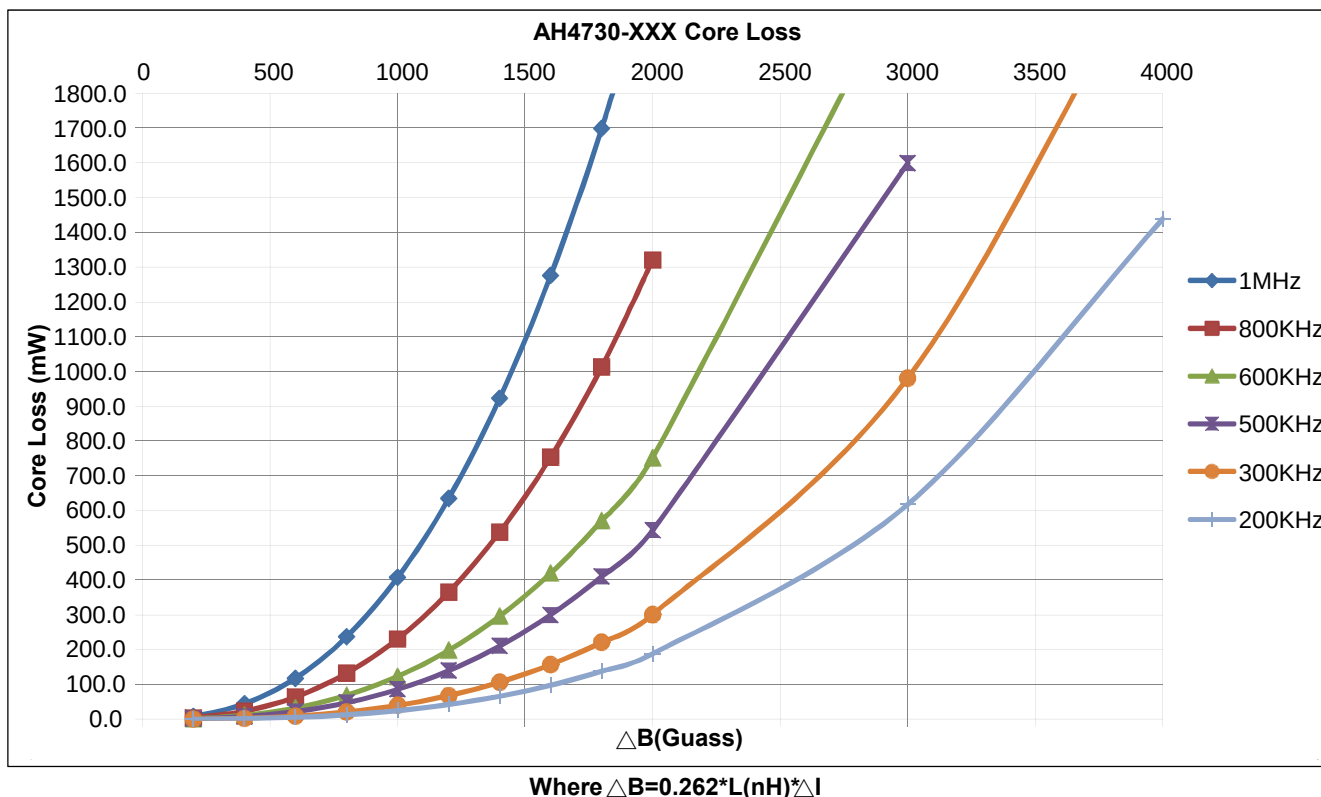
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5. Core loss Characteristics of AH4730 Series:



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