

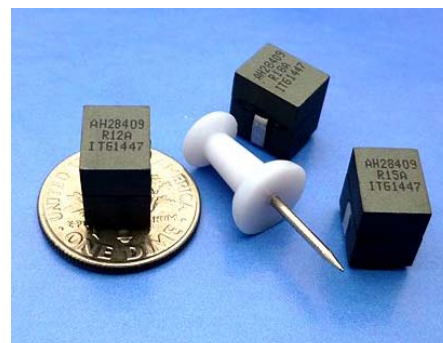


AH28409A Series



1. Features of AH28409A Series:

- Ferrite based SMD inductor with lower core loss.
- Inductance Range: 120.0nH to 180.0nH
- Custom values are welcomed.
- High current output chokes up to 72.0 Amp with approx. 20% roll off.
- Low profile 10.00mm max height with 7.20 x 9.00mm footprint.
- Ideal for buck converter, VRM and High density board design
- Operating frequency of up to 2.0MHz.
- Operating temperature range of -55°C to + 130°C
- RoHS & HF compliant.
- T & R Qty's: 350 pcs, 13" Reel.

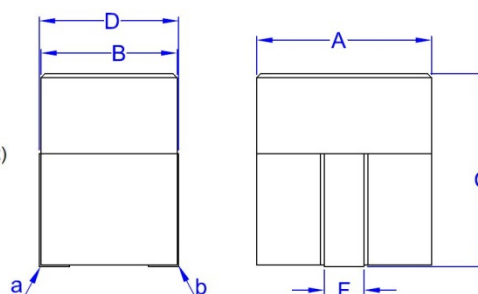
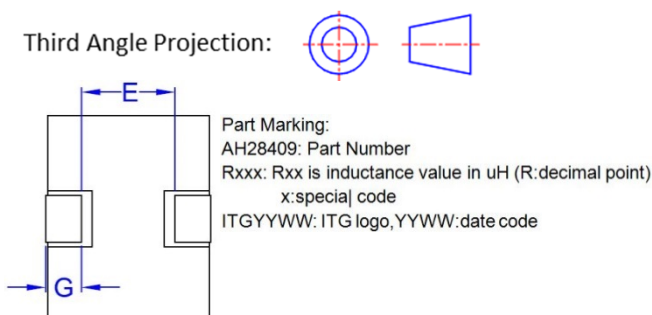
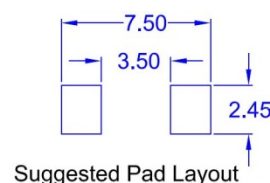
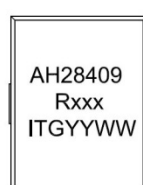


2. Electrical Characteristics of AH28409A Series:

ITG Part Number	OCL ¹ (nH) ±10%	L @ Isat1 ² (nH) Min.	DCR ³ (mΩ) ±7.0%	Isat1 ⁴ (A) @25°C	Isat2 ⁴ (A) @45°C	Isat3 ⁴ (A) @100°C	Irms ⁵ (A) @25°C
AH28409A-R12KHF	120.00	84.00	0.20	72.00	66.00	62.00	65.00
AH28409A-R15KHF	150.00	105.00	0.20	56.00	52.00	48.00	65.00
AH28409A-R18KHF	180.00	126.00	0.20	46.00	43.00	39.00	65.00

3. Mechanical Dimension of AH28409A Series:

A Max.	B Max.	C Max.	D Max.	E Ref.	F ±0.20	G ±0.30
9.00	7.10	10.00	7.20	3.95	2.00	1.52



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, 0.25Vrm (Ta=25°C).
3. The nominal DCR is measured from point a to point b as shown above in 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.
6. Derating is necessary for AC currents.
7. Verify and check PCB pad thickness, width, air-flow and proximity of other heat generating components as it will have an effect on the temperature rise.
8. 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
 ● sales@ITG-Electronics.com ● www.ITG-Electronics.com Revision A: February 8, 2016

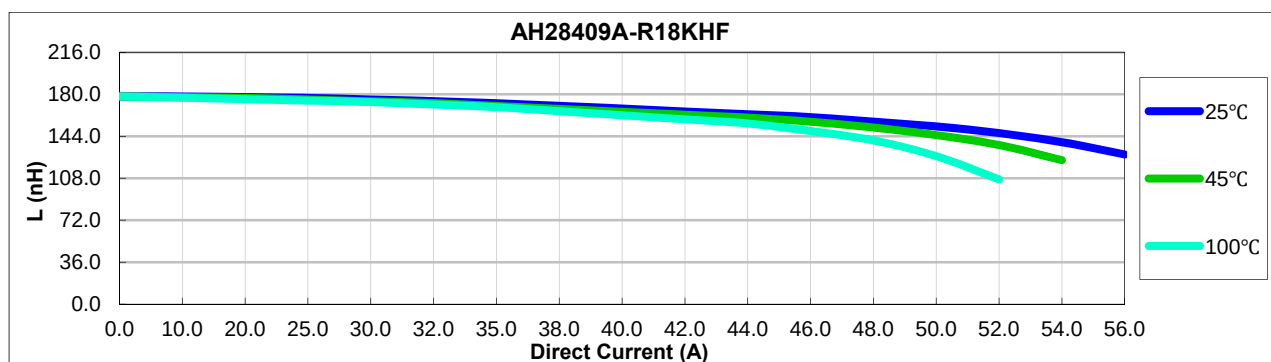
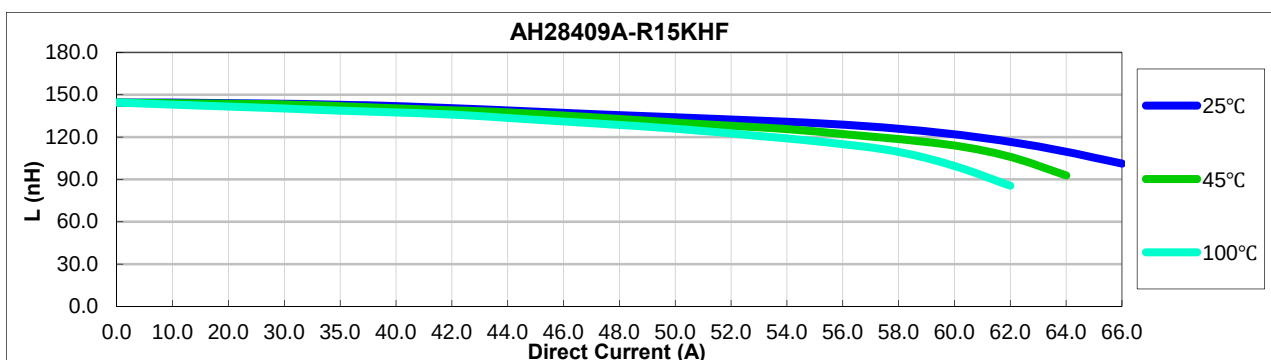
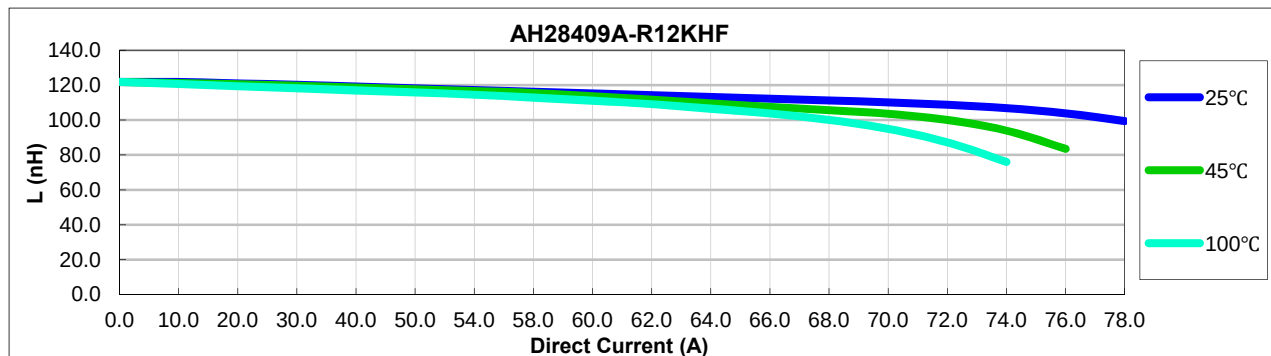
**Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.*



AH28409 Series



3. Inductance Characteristics of AH28409A Series (Inductance vs Current):



● 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
 ● sales@ITG-Electronics.com ● www.ITG-Electronics.com Revision A: February 8, 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.*