

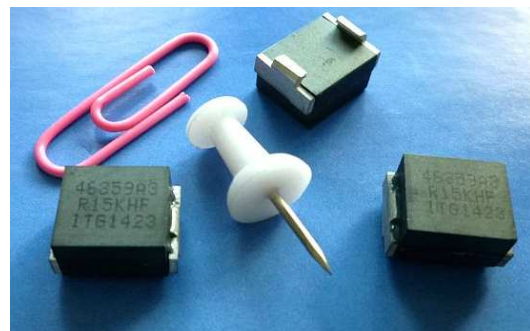


AHD46359 Series



1. Features:

- Ferrite based SMD Inductor with lower core loss.
- Inductance Range:140nH to 150nH. Custom values are welcomed.
- High current output chokes, upto 76.0 Amp with approx. 30% roll off.
- Low Profile 8.80mm Max. height .
- Foot Print 12.00 x 9.40 mm Max.
- Ideal for Buck Converter, VRM & High Density Board Design.
- Operating frequency up to 1.0 MHz application.
- Operating Temperature Range -55°C to + 130°C , RoHs & HF compliance .
- T & R Qtys: 450 pcs , 13" Reel ;

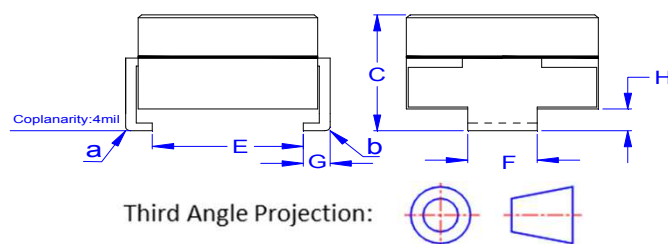
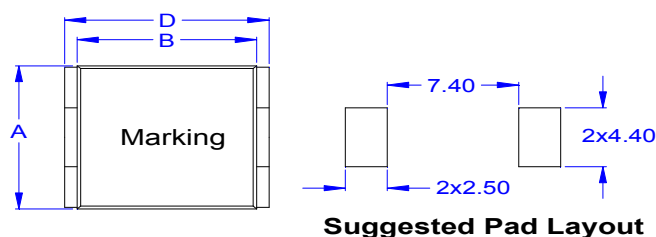


2. Electrical Characteristic of AHD46359 Series:

Part Number	OCL ¹ (nH) ± 10%	L @ Isat ² (nH) Min.	DCR ³ (mΩ) ± 8.0%	Isat1 ⁴ (A) @25°C	Isat2 ⁴ (A) @75°C	Isat3 ⁴ (A) @100°C	Isat4 ⁴ (A) @125°C	Irms ⁵ (A) @25°C
AHD46359A-R14KHF	140.00	100.00	0.10	76.00	71.00	67.00	64.00	75.00
AHD46359A-R15KHF	150.00	100.00	0.10	70.00	66.00	62.00	58.00	75.00

3. Mechanical Dimension(Unit:mm):

A	B	C	D	E	F	G	H
± 0.20	± 0.20	(Max.)	± 0.20	± 0.30	± 0.20	± 0.30	Min.
9.20	10.10	8.80	11.80	8.00	3.90	2.00	1.60



Note:

- 1>.Open Circuit Inductance (OCL) test condition:500KHz,0.25Vrms,0Adc ,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" to point"b",as shown above on the mechanical drawing ; (Ta=25°C).
- 4>.Isat1,Isat2,Isat3 & Isat4 : DC current that will cause inductance to drops approximately by 30% ;
- 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.



AHD46359 Series

Inductance vs. Current



4. Inductance Characteristics (Inductance vs. Current):

