

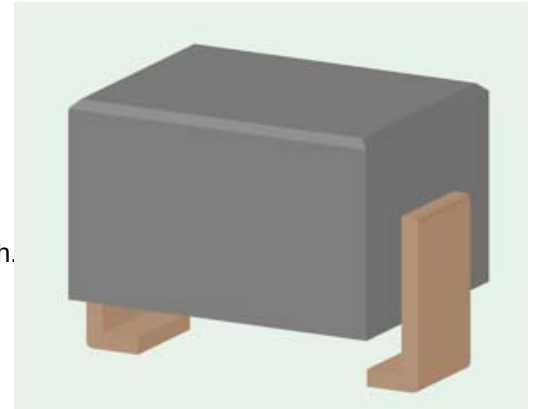


AHD13D Series



1. Features:

- Ferrite based SMD inductor with lower core loss.
- Inductance range:120nH to 180nH. Custom values are welcomed.
- High current output chokes, up to 100.0 Amp with approx. 20% roll off.
- Low profile 9.0mm Max. height .
- Foot Print 12.20 x 8.30 mm Max.
- Perfect for high density designs with limited board space.
- Saves 50% of application board area when compared to standard design approach.
- Operating frequency up to 2.0 MHz.
- Operating Temperature Range -55°C to + 130°C , RoHs & HF compliant .
- T & R Qtys: 450 pcs , 13" Reel ;

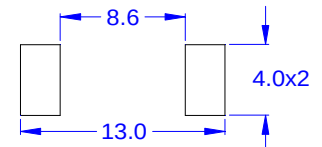
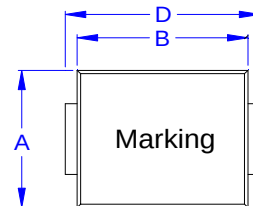


2. Electrical Characteristic of AHD13D Series:

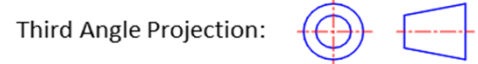
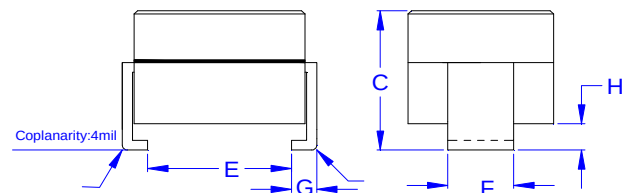
ITG Part Number	OCL ¹ (nH) ± 10%	L @ Isat1 ² (nH) Min.	DCR ³ (mΩ) ± 5.0%	Isat1 ⁴ (A) @25°C	Isat2 ⁴ (A) @75°C	Isat3 ⁴ (A) @100°C	Irms ⁵ (A) @25°C
AHD13D-R120K	120.00	84.00	0.155	100.00	96.00	90.00	72.00
AHD13D-R150K	150.00	105.00	0.155	80.00	77.00	72.00	72.00
AHD13D-R180K	180.00	126.00	0.155	65.00	62.00	60.00	72.00

3. Mechanical Dimension(Unit:mm):

A	B	C	D	E	F	G	H
± 0.30	± 0.30	(Max.)	± 0.30	± 0.10	± 0.20	± 0.30	Min.
8.00	10.90	9.00	12.50	8.70	3.50	1.95	1.50



Suggested Pad Layout



Notes:

- 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 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.