

1. Features of AHA47475A Series :

- Ferrite based TLVR inductor with lower core loss.
- Inductance Range: 70.0nH to 180.0nH, Custom values are welcomed.
- High current output chokes, up to 150.0 Amp with approx. 20% roll off.
- Low Profile 12.00 mm Max. height .
- Foot Print 12.00 x 5.00 mm .
- 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 Qtys: 400 pcs , 13" Reel ;

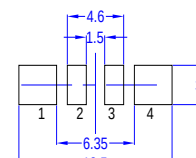
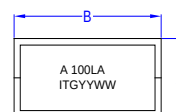


2. Electrical Characteristic of AHA47475A Series:

ITG Part Number	OCL ¹ Pin 1-4 & 2-3 (nH) ± 15%	L @ Isat1 ² Pin 1-4 & 2-3 (nH) Min.	DCR1 ³ Pin 1-4 (mΩ) ± 10%	DCR2 ³ Pin 2-3 (mΩ) ± 10%	Isat1 ⁴ (A) @25°C	Isat2 ⁴ (A) @75°C	Isat3 ⁴ (A) @100°C	Irms1 ⁵ Pin 1-4 (A) @25°C	Irms2 ⁵ Pin 2-3 (A) @25°C
AHA47475A-70L	70.00	50.40	0.145	0.65	150.00	140.00	128.00	72.00	34.00
AHA47475A-100L	100.00	72.00	0.145	0.65	105.00	99.00	90.00	72.00	34.00
AHA47475A-120L	120.00	86.40	0.145	0.65	86.00	81.00	73.00	72.00	34.00
AHA47475A-150L	150.00	108.00	0.145	0.65	68.00	64.00	57.00	72.00	34.00
AHA47475A-180L	180.00	129.60	0.145	0.65	55.00	52.00	47.00	72.00	34.00

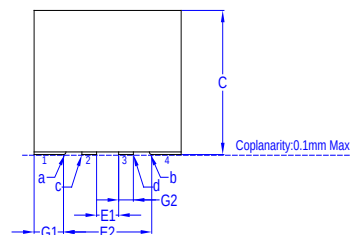
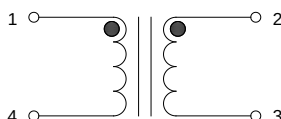
3. Mechanical Dimension(Unit : mm):

A	B	C	E1	E2	F(Pin1&4)	F(Pin2&3)
Max.	Max.	Max.	± 0.20	± 0.20	± 0.20	± 0.20
5.00	12.00	12.00	2.00	6.85	2.20	2.20
G1	G2					
± 0.20	± 0.20					
2.50	1.05					



Suggested Pad Layout

Schematic:



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 DCR1 is measured from point "a" to point "b", as shown above on the mechanical drawing (Ta=25°C).
The nominal DCR2 is measured from point "c" to point "d", as shown above on the mechanical drawing (Ta=25°C).
4. Isat1,Isat2 & Isat3 for OCL Pin 1-4 or 2-3: 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.
6. High pot: 100Vdc, 1s, 3mA.

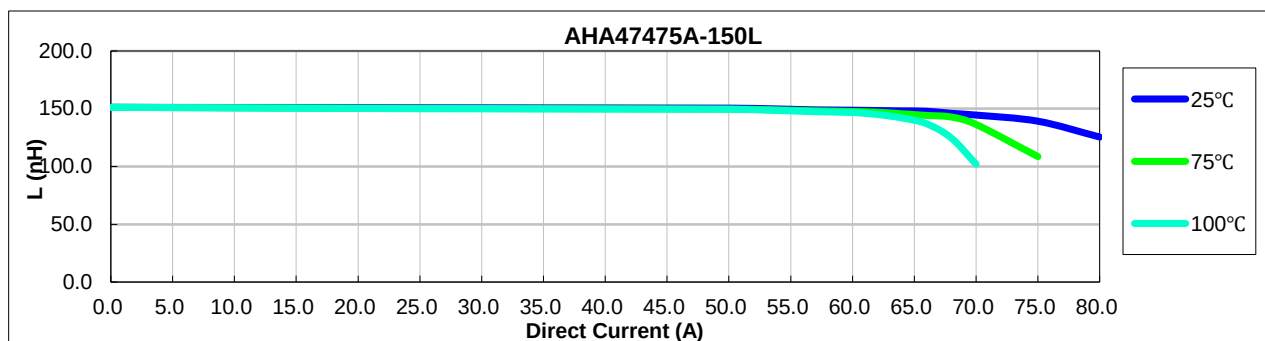
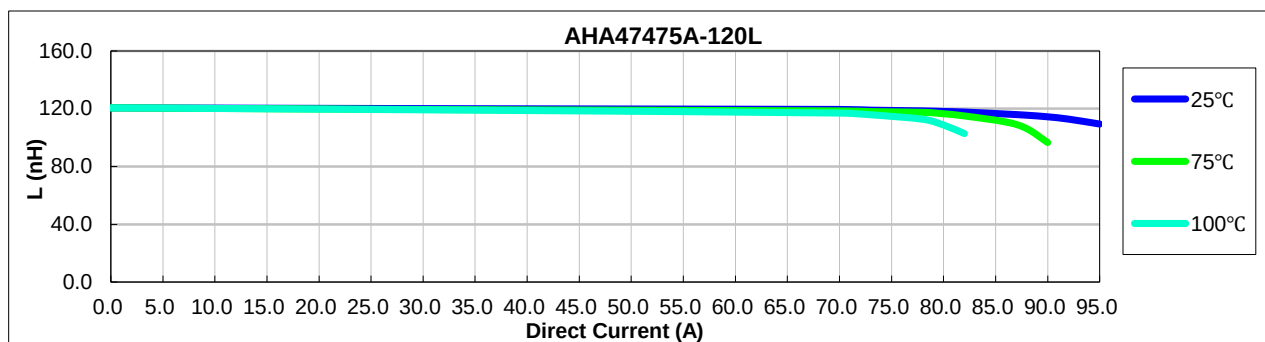
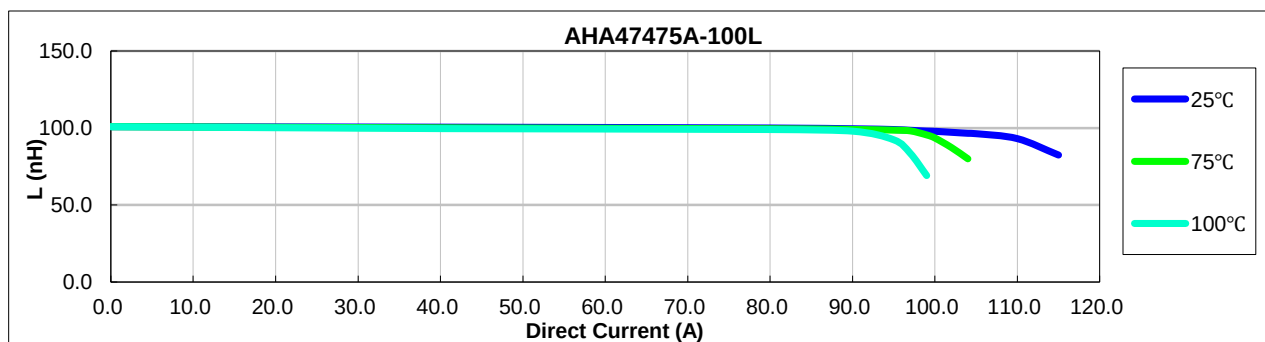
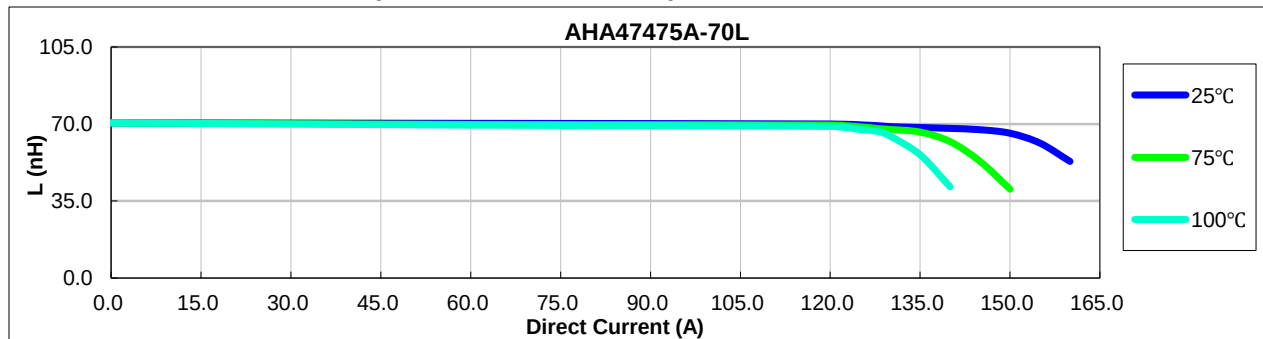
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*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.

4. Inductance Characteristics (Inductance vs. Current):





AHA47475A Series



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