

AHA47475A-R1 Series



1. Features of AHA47475A-R1 Series :

- Immersion cooling ready power beads.
- 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-R1 Series:

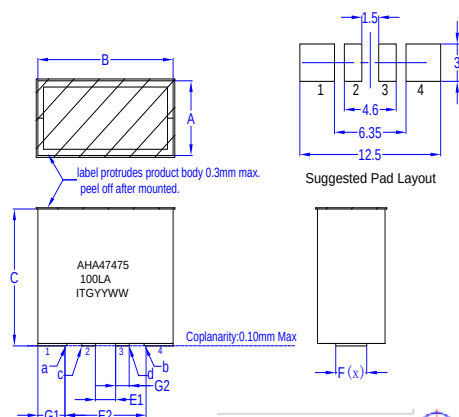
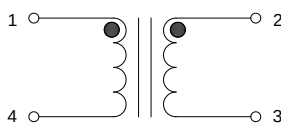
ITG Part Number	OCL ¹	L @ Isat1 ²	DCR1 ³	DCR2 ³	Isat1 ⁴	Isat2 ⁴	Isat3 ⁴	Irms1 ⁵	Irms2 ⁵
	Pin 1-4 & 2-3	Pin 1-4 & 2-3	Pin 1-4	Pin 2-3				Pin 1-4	Pin 2-3
	(nH) ± 15%	(nH) Min.	(mΩ) ± 10%	(mΩ) ± 10%	(A) @25°C	(A) @75°C	(A) @100°C	(A) @25°C	(A) @25°C
AHA47475A-70L-R1	70.00	50.40	0.145	0.65	150.00	140.00	128.00	72.00	34.00
AHA47475A-100L-R1	100.00	72.00	0.145	0.65	105.00	99.00	90.00	72.00	34.00
AHA47475A-120L-R1	120.00	86.40	0.145	0.65	86.00	81.00	73.00	72.00	34.00
AHA47475A-150L-R1	150.00	108.00	0.145	0.65	68.00	64.00	57.00	72.00	34.00
AHA47475A-180L-R1	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

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.
7. Please contact ITG Sales or FAE to discuss your immersion cooling solvent and manufacturing process, ITG engineers will verify each customer's immersion cooling PCBA process.

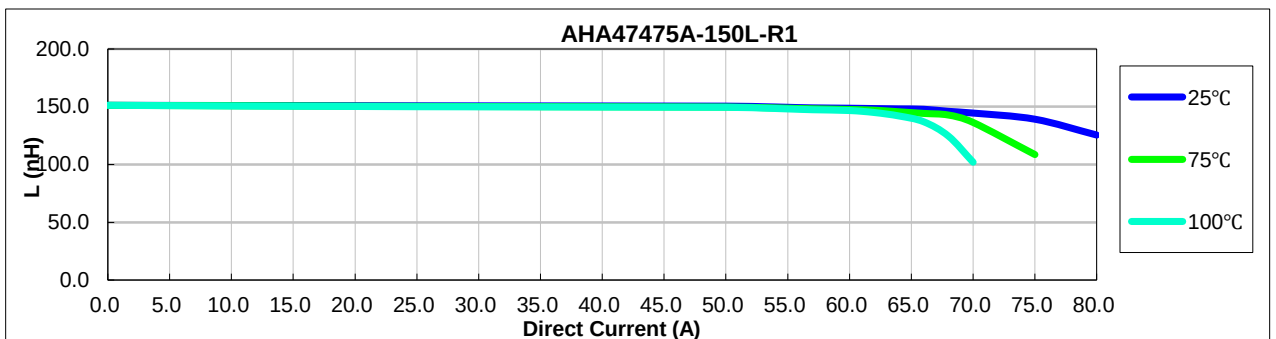
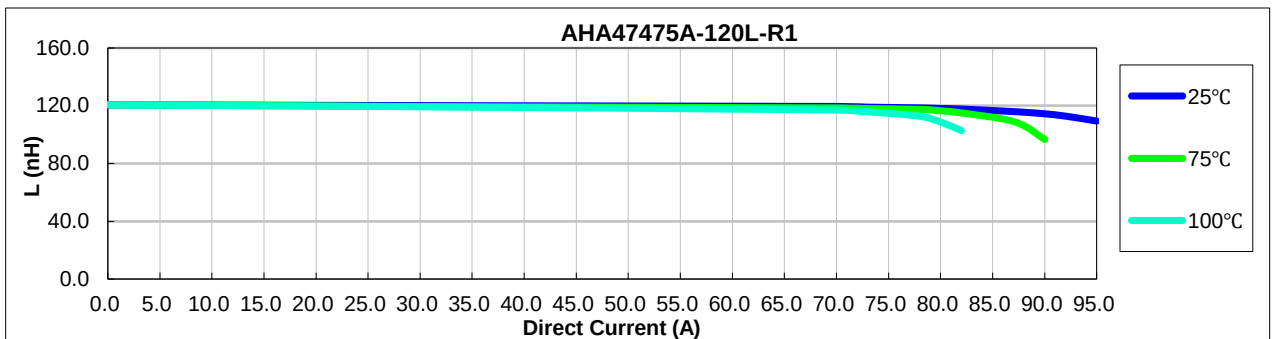
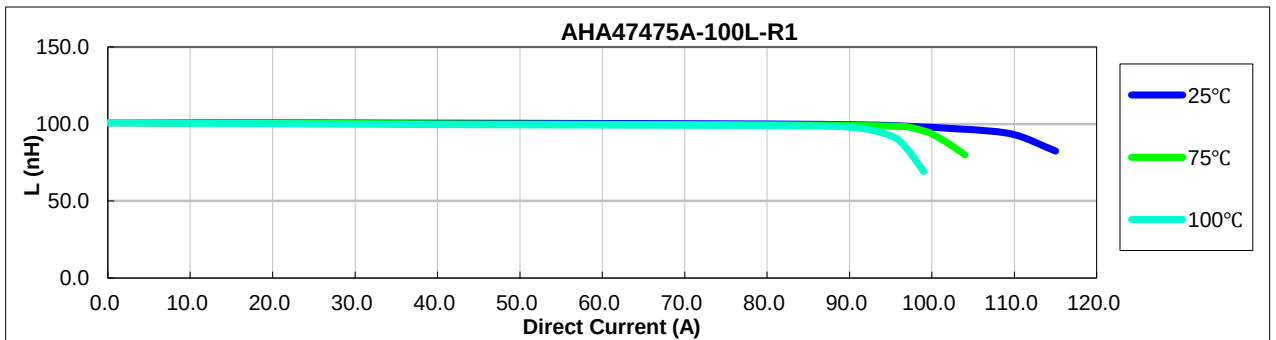
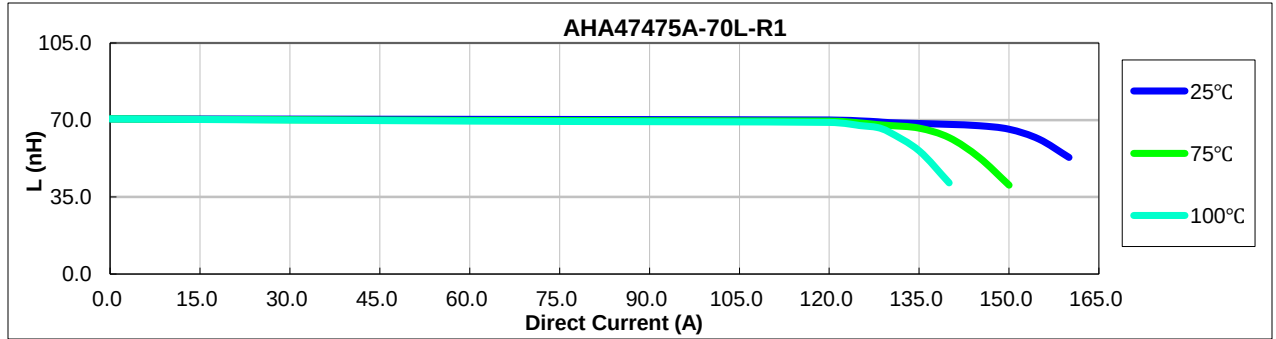
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*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.

4. Inductance Characteristics (Inductance vs. Current):



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