

AHA3747A Series



1. Features of AHA3747A Series :

- Ferrite based TLVR inductor with lower core loss.
- Inductance Range: 100.0nH to 170.0nH, Custom values are welcomed.
- High current output chokes, up to 110.0 Amp with approx. 20% roll off.
- Low Profile 12.00 mm Max. height .
- Foot Print 9.60 x 6.40 mm .
- Co-layout single inductors are available upon request for flexible design options.
- Operating frequency up to 5.0 MHz application.
- Operating Temperature Range -55° C to +130° C , RoHs & HF compliance .
- T & R Qty: 400 pcs , 13" Reel ;

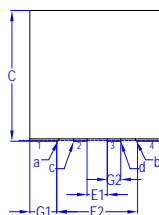
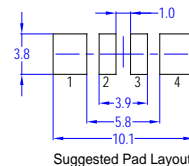
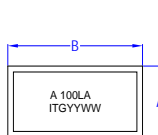


2. Electrical Characteristic of AHA3747A Series:

ITG Part Number	OCL ¹	L @ Isat ²	DCR1 ³	DCR2 ³	Isat1 ⁴	Isat2 ⁴	Isat3 ⁴	Irms1 ⁵	Irms2 ⁵
	Pin 1-4 & 2-3 (nH) ± 15%	Pin 1-4 & 2-3 (nH) Min.	Pin 1-4 (mΩ) ± 10%	Pin 2-3 (mΩ) ± 10%	(A) @25°C	(A) @75°C	(A) @100°C	Pin 1-4 (A) @25°C	Pin 2-3 (A) @25°C
AHA3747A-100L	100.00	72.00	0.145	0.55	110.00	102.00	95.00	72.00	38.00
AHA3747A-120L	120.00	86.40	0.145	0.55	92.00	85.00	80.00	72.00	38.00
AHA3747A-150L	150.00	108.00	0.145	0.55	75.00	70.00	65.00	72.00	38.00
AHA3747A-170L	170.00	122.40	0.145	0.55	65.00	60.00	56.00	72.00	38.00

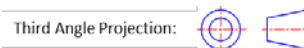
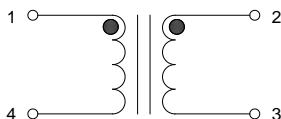
3. Mechanical Dimension(Unit : mm):

A	B	C	E1	E2	F(Pin1&4)	F(Pin2&3)
Max.	Max.	Max.	± 0.20	± 0.20	± 0.20	± 0.20
6.40	9.60	12.00	1.50	6.30	3.30	3.00
G1	G2					
± 0.20	± 0.20					
1.55	1.10					



Part Marking:
A 100LA: A is part code, 100 is inductance value in nH,
L = tolerance, A is special code.
ITGYYYW: ITG logo and YYWW is date code.

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.

● New York 1 914 347 2474 ● Taipei 886 2 2698 8669 ● Kaohsiung 886 7 350 2275

● Japan 81 568 85 2830 ● Shenzhen 86 755 8418 6263 ● Shanghai 86 21 5424 5141 ● Hong Kong 852 9688 9767

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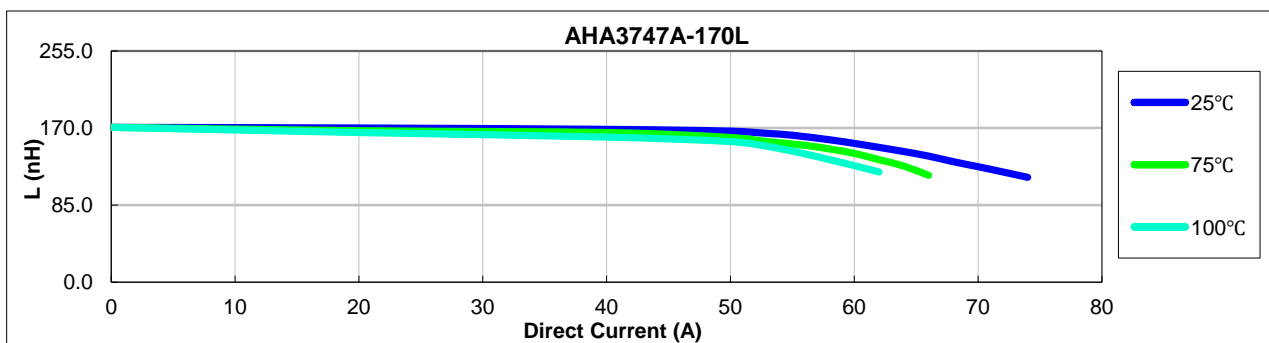
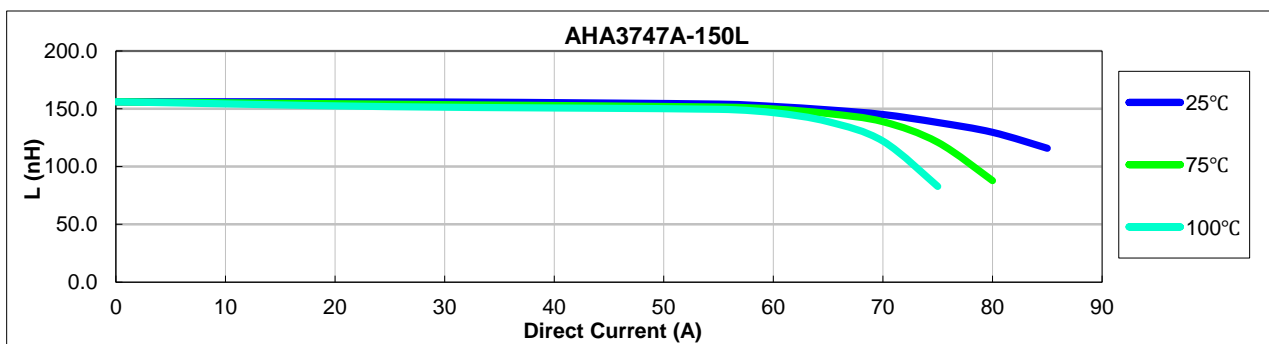
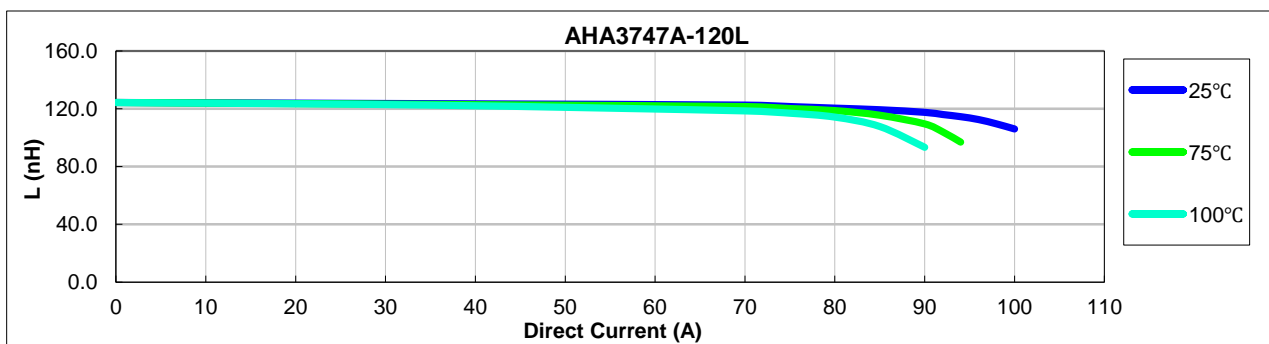
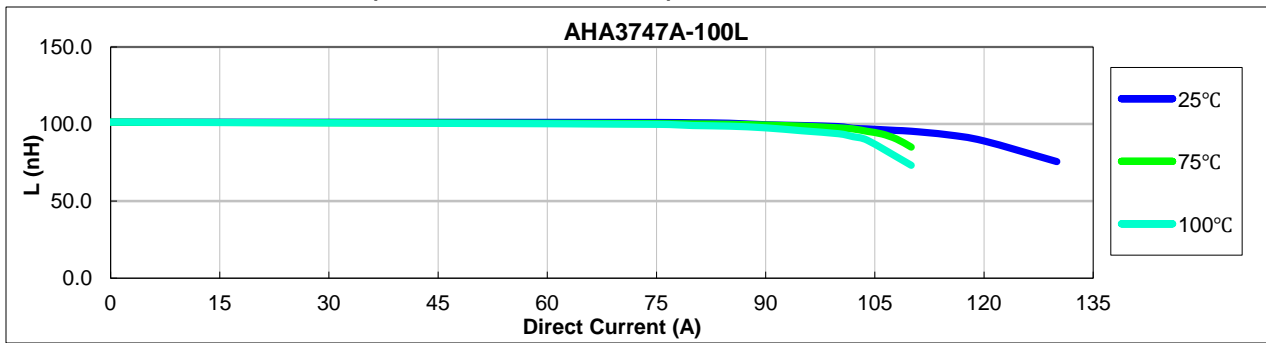


Halogen Free

AHA3747A Series



4. Inductance Characteristics (Inductance vs. Current):



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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.