

AHA47436A Series



1. Features of AHA47436A Series :

- Ferrite based TLVR inductor with lower core loss.
- Inductance Range: 70.0nH to 200.0nH, Custom values are welcomed.
- High current output chokes, up to 165.0 Amp with approx. 20% roll off.
- Low Profile 11.00 mm Max. height .
- Foot Print 12.00 x 6.00 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: 450 pcs , 13" Reel ;



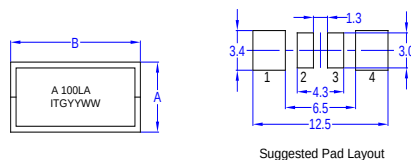
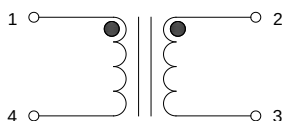
2. Electrical Characteristic of AHA47436A Series:

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
AHA47436A-70L	70.00	50.40	0.125	0.40	165.00	150.00	135.00	78.00	39.00
AHA47436A-90L	90.00	64.80	0.125	0.40	129.00	118.00	107.00	78.00	39.00
AHA47436A-100L	100.00	72.00	0.125	0.40	116.00	106.00	96.00	78.00	39.00
AHA47436A-105L	105.00	75.60	0.125	0.40	113.00	102.00	93.00	78.00	39.00
AHA47436A-120L	120.00	86.40	0.125	0.40	102.00	94.00	84.00	78.00	39.00
AHA47436A-150L	150.00	108.00	0.125	0.40	85.00	80.00	75.00	78.00	39.00
AHA47436A-170L	170.00	122.40	0.125	0.40	74.00	67.00	61.00	78.00	39.00
AHA47436A-200L	200.00	144.00	0.125	0.40	62.00	56.00	53.00	78.00	39.00

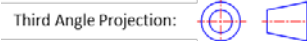
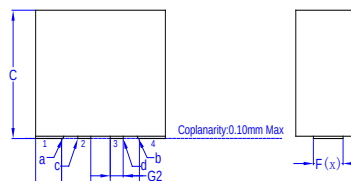
3. Mechanical Dimension(Unit : mm):

A	B	C	E1	E2	F(Pin1&4)	F(Pin2&3)
Max.	Max.	Max.	± 0.20	± 0.20	± 0.20	± 0.20
6.00	12.00	11.00	1.80	7.00	2.80	2.40
G1	G2					
± 0.20	± 0.20					
2.40	1.00					

Schematic:



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 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.

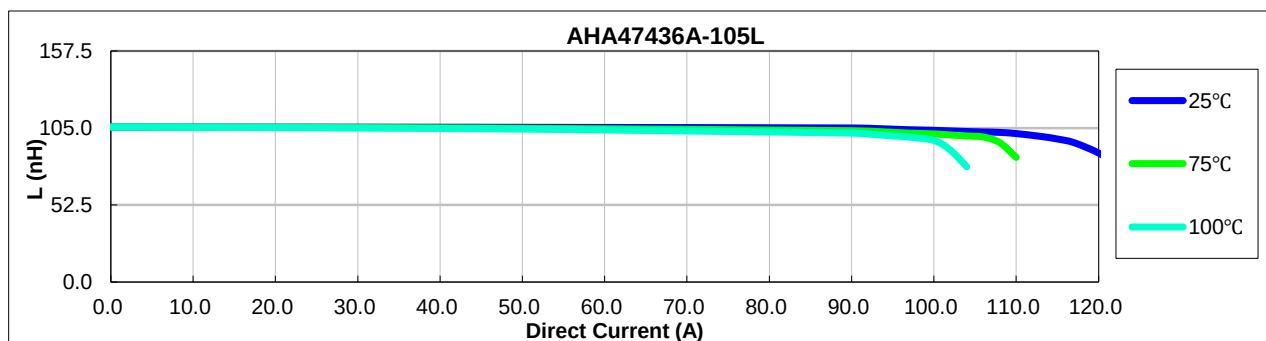
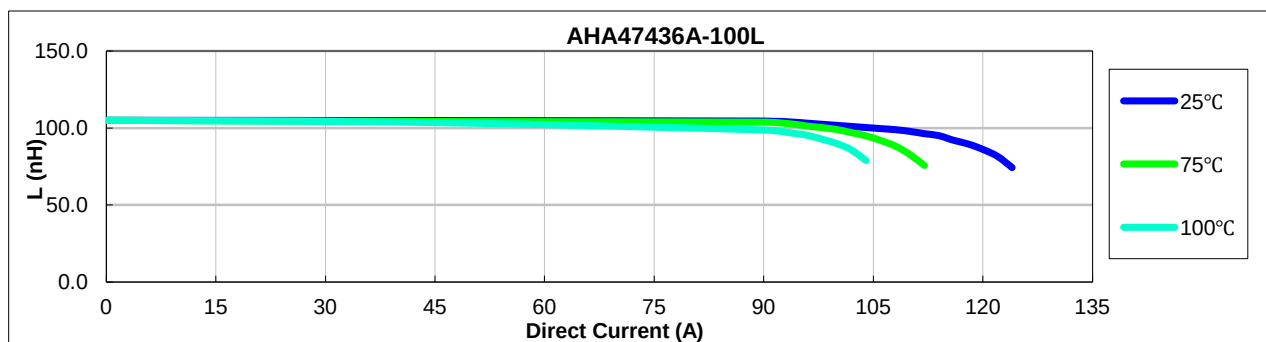
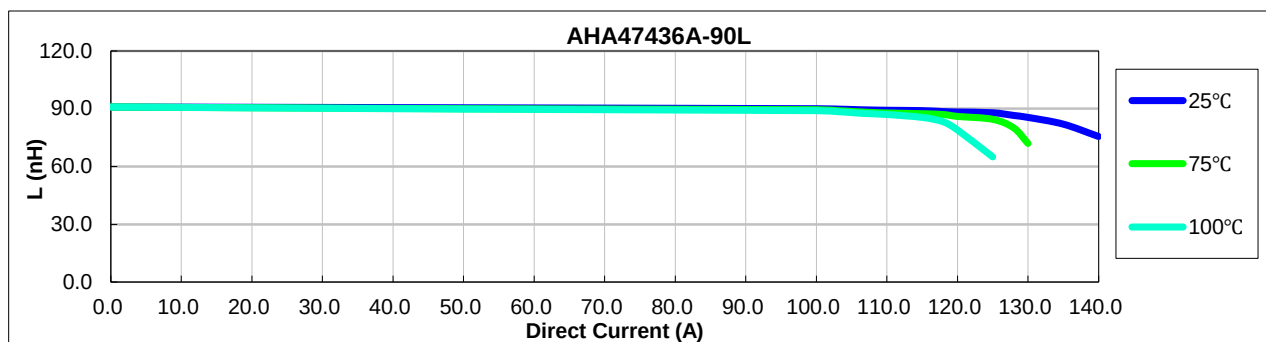
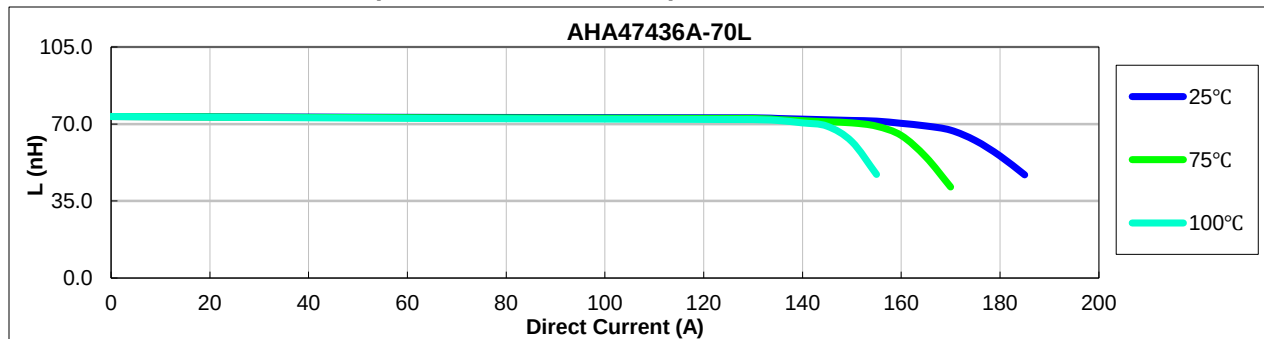
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*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.

4. Inductance Characteristics (Inductance vs. Current):



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