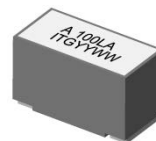


1. Features of AHA41245A Series :

- Ferrite based TLVR inductor with lower core loss.
- Inductance Range: 70.0nH to 150.0nH, Custom values are welcomed.
- High current output chokes, up to 100.0 Amp with approx. 20% roll off.
- Low Profile 6.00 mm Max. height .
- Foot Print 10.20 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 Qty: 700 pcs , 13" Reel ;

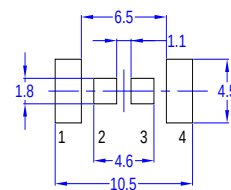
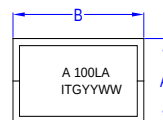


2. Electrical Characteristic of AHA41245A Series:

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)	(nH)	(mΩ)	(mΩ)	(A)	(A)	(A)	(A)	(A)
	± 15%	Min.	± 10%	± 10%	@25°C	@75°C	@100°C	@25°C	@25°C
AHA41245A-70L	70.00	50.40	0.50	0.75	100.00	90.00	83.00	45.00	36.00
AHA41245A-100L	100.00	72.00	0.50	0.75	70.00	62.00	58.00	45.00	36.00
AHA41245A-120L	120.00	86.40	0.50	0.75	58.00	51.00	48.00	45.00	36.00
AHA41245A-150L	150.00	108.00	0.50	0.75	45.00	40.00	37.00	45.00	36.00

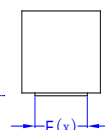
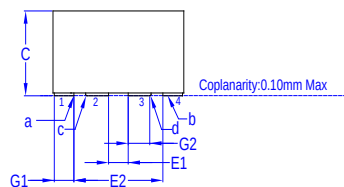
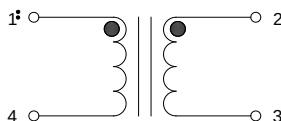
3. Mechanical Dimension(Unit : mm):

A	B	C	E1	E2	F(Pin1&4)	F(Pin2&3)
Max.	Max.	Max.	± 0.20	± 0.20	± 0.20	± 0.20
5.00	10.20	6.00	1.50	6.80	4.00	1.40
G1	G2					
± 0.20	± 0.20					
1.50	1.35					

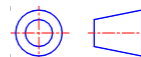


Suggested Pad Layout

Schematic



Third Angle Projection:



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

● sales@ITG-Electronics.com ● www.ITG-Electronics.com Revision A.0: October 16, 2023

*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):

