

# AHA3740A Series



## 1. Features of AHA3740A 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 125.0 Amp with approx. 20% roll off.
- Low Profile 10.00 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: 500 pcs , 13" Reel ;



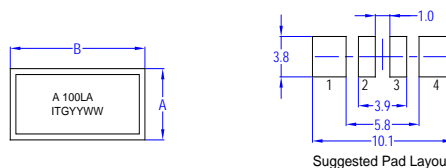
## 2. Electrical Characteristic of AHA3740A Series:

ITG Part Number	OCL <sup>1</sup>	L @ Isat1 <sup>2</sup>	DCR1 <sup>3</sup>	DCR2 <sup>3</sup>	Isat1 <sup>4</sup>	Isat2 <sup>4</sup>	Isat3 <sup>4</sup>	Irms1 <sup>5</sup>	Irms2 <sup>5</sup>
	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
AHA3740A-70L	70.00	50.40	0.125	0.45	125.00	115.00	110.00	71.00	37.00
AHA3740A-100L	100.00	72.00	0.125	0.45	92.00	88.00	82.00	71.00	37.00
AHA3740A-120L	120.00	86.40	0.125	0.45	80.00	75.00	70.00	71.00	37.00
AHA3740A-150L	150.00	108.00	0.125	0.45	65.00	58.00	55.00	71.00	37.00

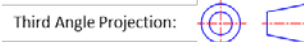
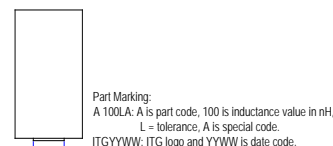
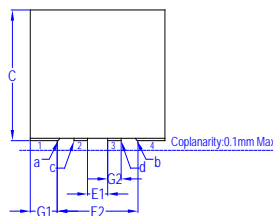
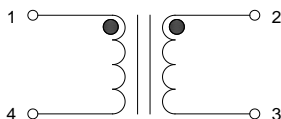
## 3. Mechanical Dimension(Unit : mm):

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	10.00	1.50	6.30	3.30	3.00

G1	G2
± 0.20	± 0.20
1.55	1.10



### Schematic:



## Notes:

1. Open Circuit Inductance (OCL) test condition: 500KHz, 0.25Vrms, 0A<sub>dc</sub>, 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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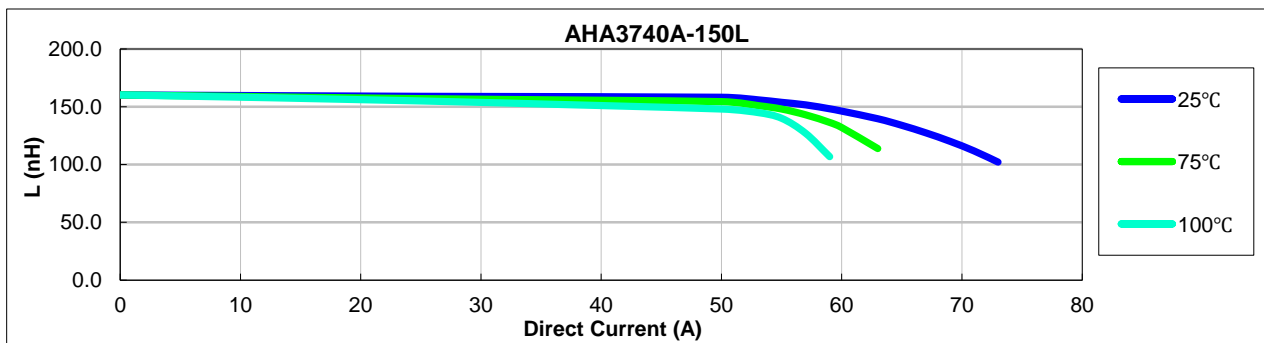
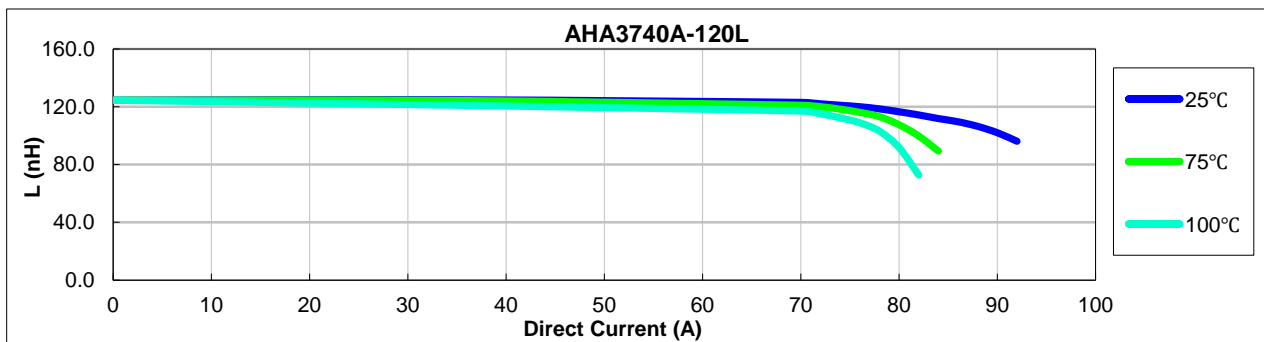
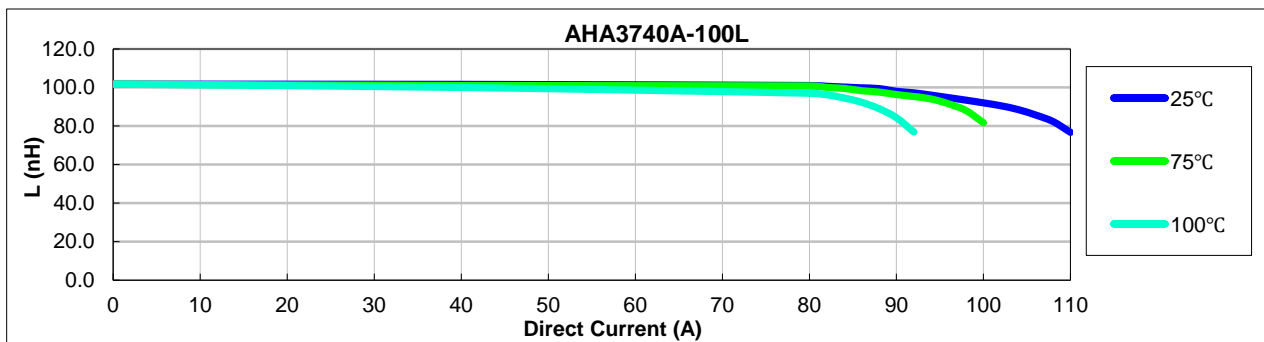
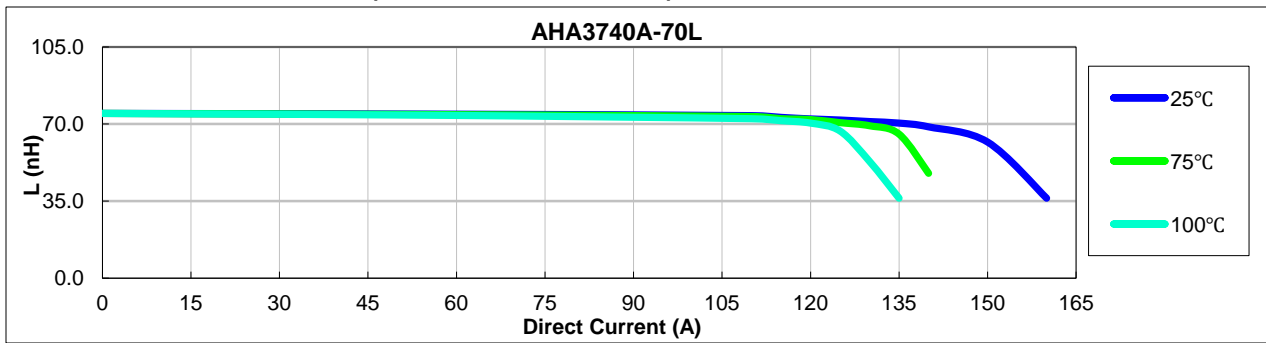


# AHA3740A Series



Halogen Free

## 4. Inductance Characteristics (Inductance vs. Current):



\*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.