

AH4240 Series



1. Features of AH4240 Series:

- Ferrite based SMD inductor with lower core loss.
- Inductance range: 70.0nH to 330.0nH , custom values are welcomed.
- High current output chokes , up to 200.0 Amp with approx. 20% roll off.
- Low profile 10.6mm / 10.3mm / 10.2mm / 10.1mm / 10.0mm typical Height.
- 10.90 x 8.00 mm Foot Print.
- Ideal for Buck Converter, VRM & High Density Board Design.
- Operating frequency of up to 5.0MHz.
- Operating temperature range of -55° C to + 130° C.
- RoHS & HF compliant.
- T & R Qty's : 350pcs, 13" Reel.

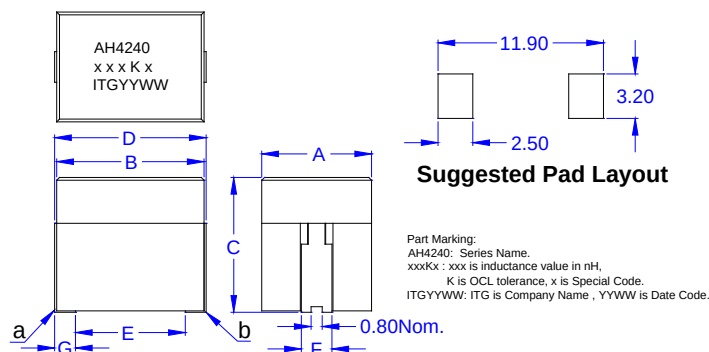


2. Electrical Characteristics of AH4240 Series:

ITG Part Number	OCL ¹ (nH) ± 10%	L@Isat1 ² (nH) MIN.	DCR ³ (mΩ) ± 5.0%	Isat1 ⁴ (A) @25°C	Isat2 ⁴ (A) @75°C	Isat3 ⁴ (A) @100°C	Isat4 ⁴ (A) @125°C	Irms ⁵ (A) @25°C	Dim. C (mm) Max.
AH4240A-70K	70.00	50.40	0.165	200.00	175.00	160.00	150.00	73.00	10.60
AH4240A-100K	100.00	72.00	0.165	135.00	125.00	115.00	108.00	73.00	10.30
AH4240A-120K	120.00	86.40	0.165	110.00	103.00	98.00	88.00	73.00	10.30
AH4240A-150K	150.00	108.00	0.165	85.00	80.00	76.00	68.00	73.00	10.20
AH4240A-180K	180.00	129.60	0.165	69.00	67.00	63.00	58.00	73.00	10.20
AH4240A-220K	220.00	158.40	0.165	55.00	52.00	49.00	44.00	73.00	10.10
AH4240A-250K	250.00	180.00	0.165	49.00	45.00	42.00	38.00	73.00	10.10
AH4240A-270K	270.00	194.40	0.165	43.00	41.00	38.00	34.00	73.00	10.00
AH4240A-300K	300.00	216.00	0.165	35.00	33.00	31.00	28.00	73.00	10.00
AH4240A-330K	330.00	237.60	0.165	30.00	29.00	27.00	25.00	73.00	10.00

3. Mechanical Dimension of AH4240 Series:

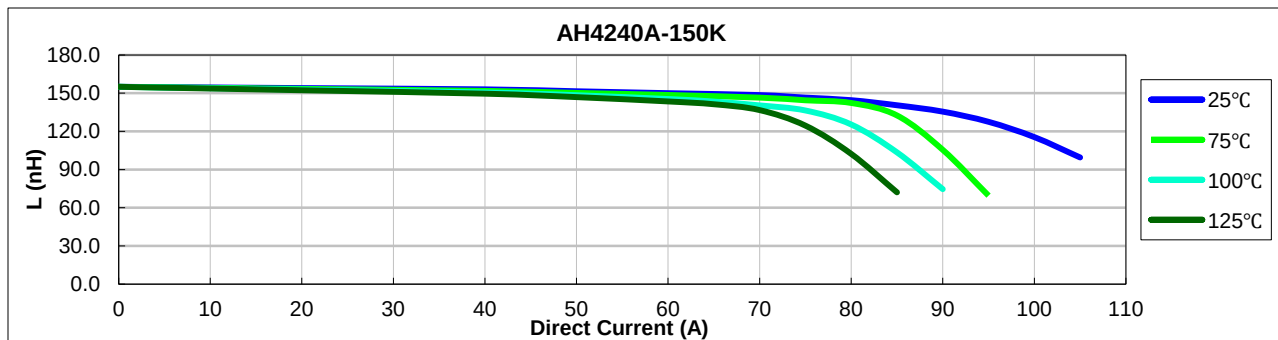
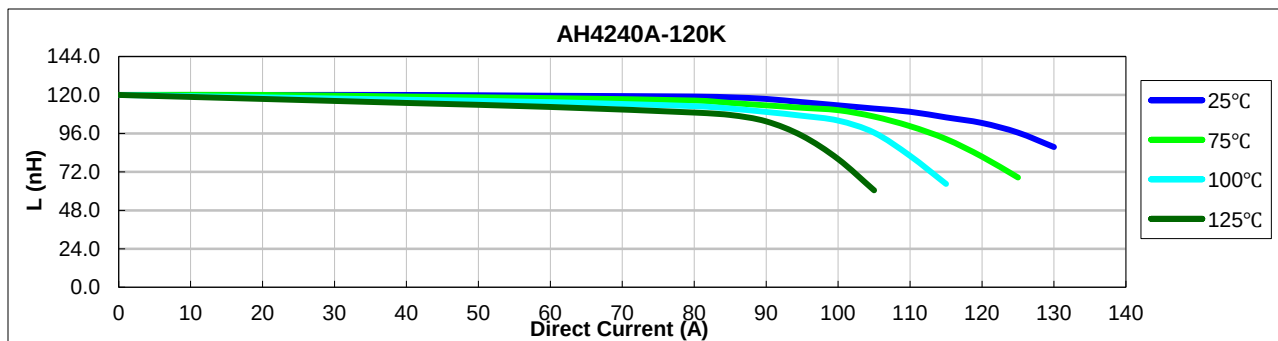
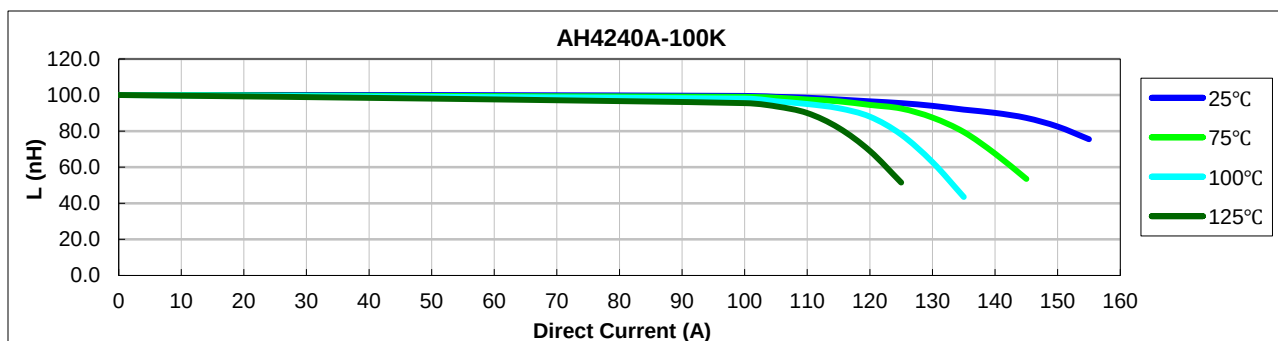
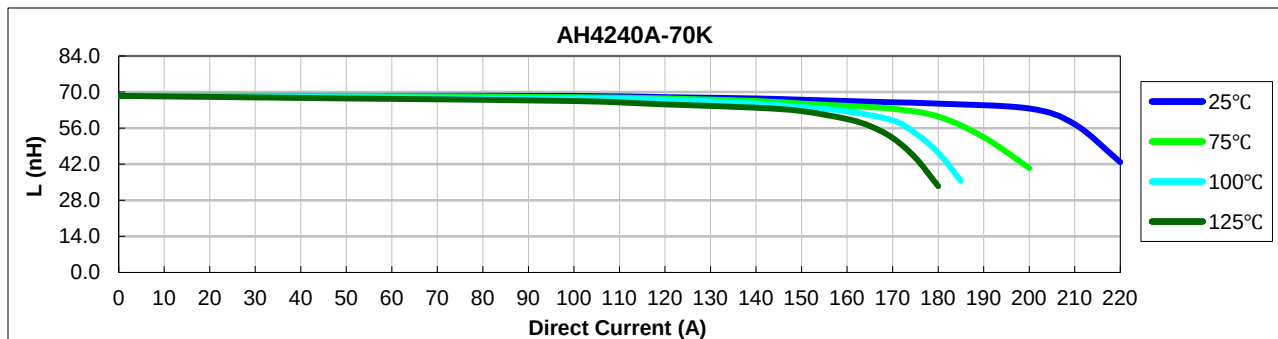
A	B	C	D	E	F	G
± 0.20	Max.	Max.	Max.	Nom.	± 0.25	± 0.35
7.80	10.75	See table above	10.90	7.90	2.20	1.50



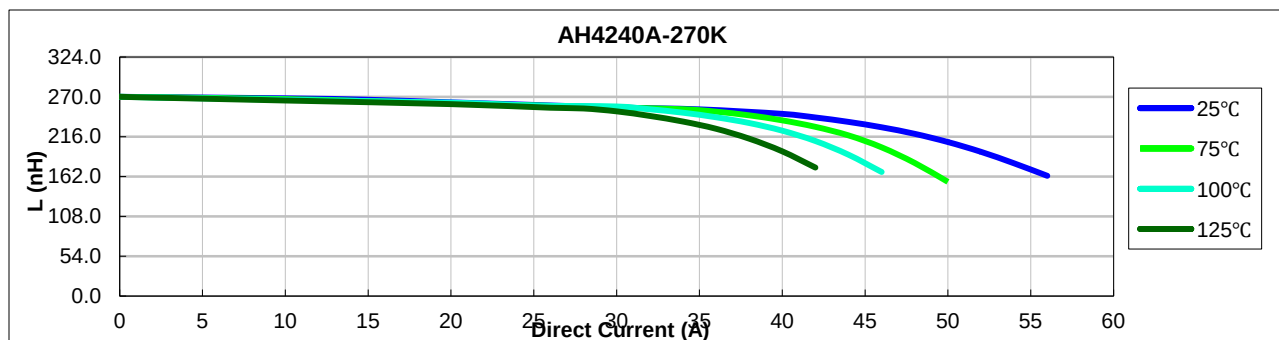
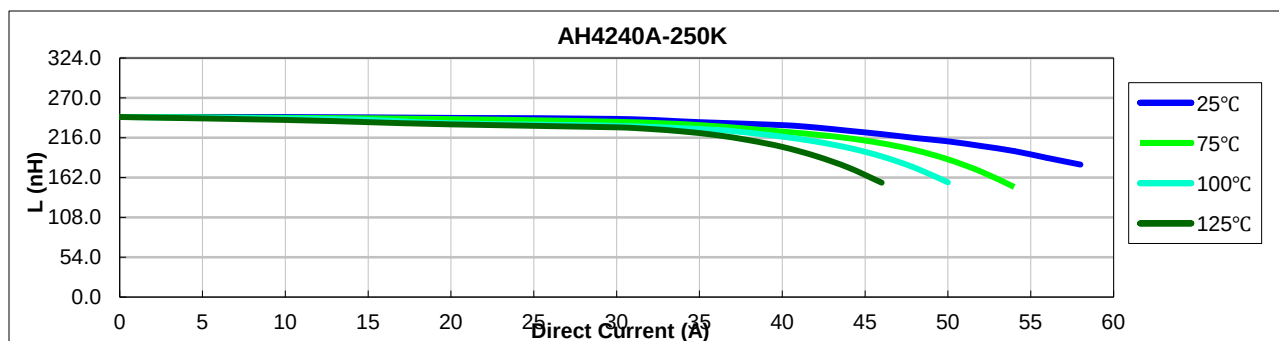
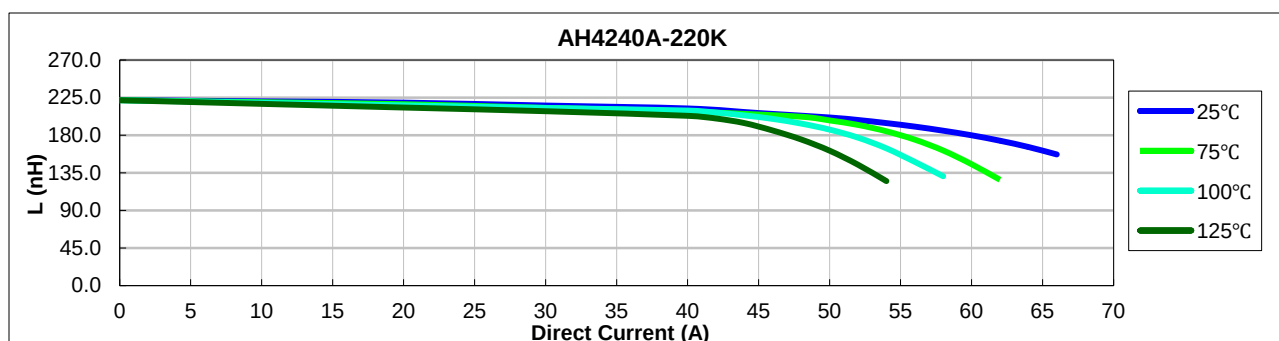
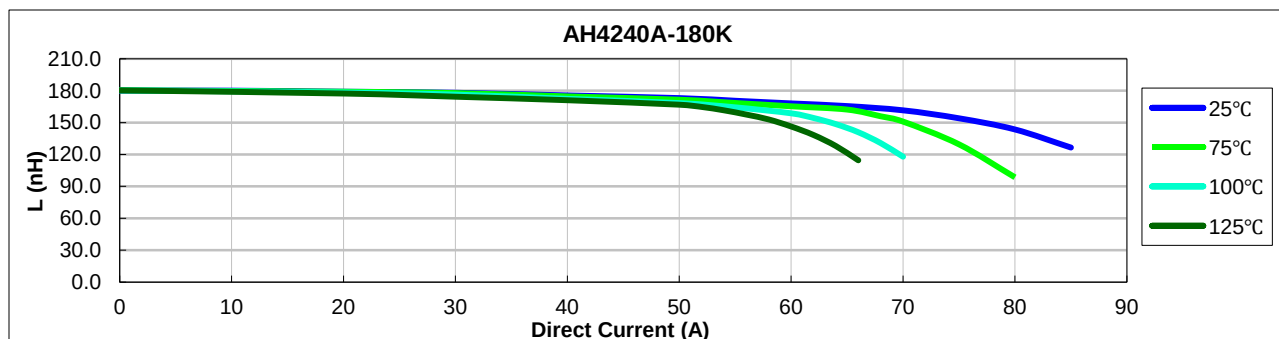
Notes:

1. Open Circuit Inductance (OCL) test condition: 500KHz, 0.25Vrms, 0A_{dc} at 25°C.
2. L @ Isat and L @ Irms Test condition: 500KHz, 0.25Vrms (Ta=25°C).
3. The nominal DCR is measured from point "a" to point "b", as shown above on the mechanical drawing (Ta=25°C).
4. Isat1, Isat2, Isat3, Isat4 : 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.
6. It is recommended the part temperature not exceed 130° C under worst case operating conditions as verified in the end application.

4. Inductance Characteristics of AH4240 Series (Inductance vs Current):



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