

Power Inductor

AHP252008RA-SERIES

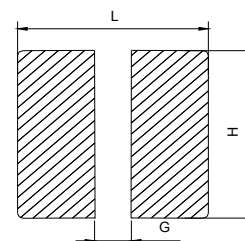
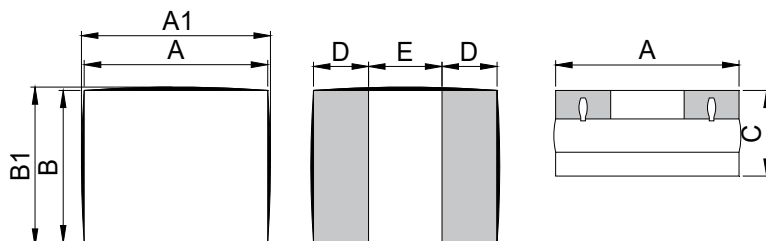
1. Features

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
3. Operating temperature : -40~+125℃ (Including self - temperature rise)



2. Dimension

Recommended Land pattern



Series	A(mm)	A1(mm)	B(mm)	B1(mm)	C(mm)	D(mm)	E(mm)
AHP252008RA	2.5-0.1/+0.2	2.8max	2.0-0.1/+0.2	2.3max	0.8Max	0.75 ref	1.00 ref

L(mm)	G(mm)	H(mm)
2.9	1.0	2.4

3. Part Numbering

AHP	252008	RA	-	1R5	M
A	B	C		D	E

A: Series

B: Dimension

C: Lead Free

D: Inductance

E: Inductance Tolerance

Material

1R5=1.5uH

M=±20%

4. Specification

Part Number	Inductance (μ H) $\pm 20\%$ @ 0 A	Test Frequency (Hz)	I rms (A)		I sat (A)		DCR (Ω)	
			Typ	Max	Typ	Max	Typ	Max
AHP252008RA-R24M	0.24	1V/1M	4.50 (1) 4.70 (2)	4.00 (1) 4.20 (2)	5.30	4.80	0.035	0.042
AHP252008RA-R33M	0.33	1V/1M	3.90 (1) 4.30 (2)	3.50 (1) 3.90 (2)	4.80	4.30	0.040	0.055
AHP252008RA-R47M	0.47	1V/1M	3.70 (1) 4.10 (2)	3.30 (1) 3.70 (2)	4.50	4.00	0.045	0.060
AHP252008RA-R68M	0.68	1V/1M	3.50 (1) 3.70 (2)	3.00 (1) 3.20 (2)	4.00	3.50	0.060	0.075
AHP252008RA-1R0M	1.00	1V/1M	2.80 (1) 3.20 (2)	2.50 (1) 2.80 (2)	3.20	2.80	0.070	0.090
AHP252008RA-1R5M	1.50	1V/1M	2.30 (1) 2.50 (2)	2.10 (1) 2.30 (2)	2.80	2.60	0.105	0.127
AHP252008RA-2R2M	2.20	1V/1M	1.80 (1) 2.20 (2)	1.60 (1) 1.80 (2)	2.00	1.80	0.150	0.180
AHP252008RA-3R3M	3.30	1V/1M	1.60 (1) 1.80 (2)	1.30 (1) 1.50 (2)	1.60	1.30	0.220	0.260
AHP252008RA-4R7M	4.70	1V/1M	1.20 (1) 1.30 (2)	1.00 (1) 1.10 (2)	1.50	1.20	0.360	0.430

Note:

Isat: Saturation Current (Isat) will cause L0 to drop approximately 30%.

Irms: Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40°C

Rated DC current: The lower value of Irms and Isat.

Measurement board data

Irms1

Material : FR4

Board dimensions : 100 X 50 X 1.6t mm

Pattern dimensions: 45 X 30 mm (Double side board)

Pattern thickness : 50 μ m

Irms2

Material : FR4

Board dimensions : 100 X 50 X 1.6t mm

Pattern dimensions: 45 X 45 mm (Double side board)

Pattern thickness : 70 μ m

10. Typical Performance Curves

