

Power Inductor

AHP252012FA-SERIES

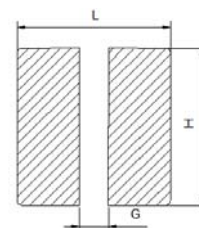
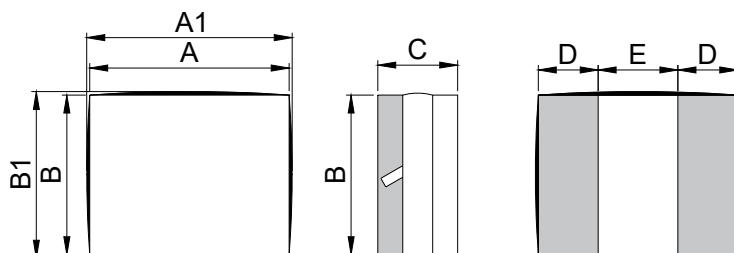
1. Features

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 PC Board Pattern



A	A1	B	B1	C	D	E
2.5-0.1/+0.2	2.8max	2.0-0.1/+0.2	2.3max	1.2Max	0.75 ref	1.00 ref

Unit:mm

L	G	H
2.9	1.0	2.4

3. Part Numbering

AHP **252012** **FA** - **2R2** **M**

A B C D E

A: Series

B: Dimension

C: Lead Free

D: Inductance

E: Inductance Tolerance

Material

2R2=2.20uH

K=± 10%, L=± 15%, M=± 20%, Y=± 30%.

4. Specification

Part Number	Inductance (uH) $\pm 20\%$ @ 0 A DC	Test Frequency (Hz)	I rms (A)		I sat (A)		DCR (Ω)	
			Typ	Max	Typ	Max	Typ	Max
AHP252012FA-R24M	0.24	1V/1M	6.0(1) 7.0(2)	5.5(1) 6.0(2)	8.4	7.4	0.0145	0.019
AHP252012FA-R33M	0.33	1V/1M	5.50(1) 6.50(2)	5.00(1) 5.50(2)	8.00	7.20	0.016	0.021
AHP252012FA-R47M	0.47	1V/1M	5.00(1) 6.00(2)	4.50(1) 5.00(2)	7.40	6.70	0.017	0.023
AHP252012FA-R68M	0.68	1V/1M	4.30(1) 5.00(2)	3.80(1) 4.50(2)	5.50	4.90	0.027	0.032
AHP252012FA-1R0M	1.00	1V/1M	3.90(1) 4.50(2)	3.30(1) 3.80(2)	5.30	4.70	0.034	0.040
AHP252012FA-1R5M	1.50	1V/1M	3.50(1) 4.00(2)	3.00(1) 3.50(2)	4.50	3.90	0.050	0.060
AHP252012FA-2R2M	2.20	1V/1M	2.60(1) 3.00(2)	2.20(1) 2.60(2)	3.40	3.00	0.070	0.084
AHP252012FA-3R3M	3.30	1V/1M	1.40(1) 1.60(2)	1.20(1) 1.40(2)	1.50	1.30	0.085	0.100

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

