

Power Inductor

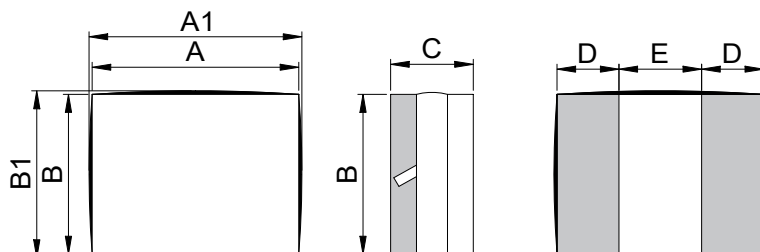
AHP252010FA-SERIES

1. Features

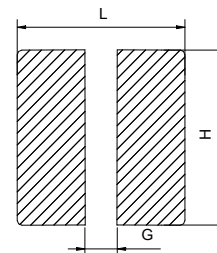
1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
3. Operating temperature : -40~+125℃ (Including self - temperature rise)



2. Dimension



Recommended PC Board Pattern



Series	A(mm)	A1	B(mm)	B1	C(mm)	D(mm)	E(mm)
AHP252010FA	2.5-0.1/+0.2	2.8max	2.0-0.1/+0.2	2.3max	1.0Max	0.75 ref	1.00 ref

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

3. Part Numbering

AHP
252010
FA
-
2R2
M

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	Test Frequency (Hz)	I rms (A)		I sat (A)		DCR (Ω)	
			Typ	Max	Typ	Max	Typ	Max
AHP252010FA-R24M	0.24	1V/1M	5.50 (1) 6.00 (2)	5.00 (1) 5.50 (2)	9.50	8.00	0.018	0.022
AHP252010FA-R33M	0.33	1V/1M	5.30 (1) 5.60 (2)	4.80 (1) 5.10 (2)	8.00	6.50	0.023	0.028
AHP252010FA-R47M	0.47	1V/1M	4.60 (1) 5.30 (2)	4.20 (1) 4.80 (2)	7.00	5.90	0.027	0.035
AHP252010FA-R68M	0.68	1V/1M	4.20 (1) 4.40 (2)	3.80 (1) 4.00 (2)	5.50	4.60	0.032	0.040
AHP252010FA-1R0M	1.00	1V/1M	3.50 (1) 3.70 (2)	3.10 (1) 3.40 (2)	4.90	4.30	0.044	0.053
AHP252010FA-1R5M	1.50	1V/1M	3.20 (1) 3.40 (2)	2.80 (1) 3.00 (2)	3.80	3.10	0.062	0.074
AHP252010FA-2R2M	2.20	1V/1M	2.60 (1) 2.80 (2)	2.30 (1) 2.50 (2)	2.80	2.30	0.078	0.093
AHP252010FA-3R3M	3.30	1V/1M	2.00 (1) 2.20 (2)	1.80 (1) 2.00 (2)	2.10	1.80	0.125	0.150
AHP252010FA-4R7M	4.70	1V/1M	1.70 (1) 1.80 (2)	1.50 (1) 1.60 (2)	1.70	1.40	0.180	0.216

Note:

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

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

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

