

Power Inductor

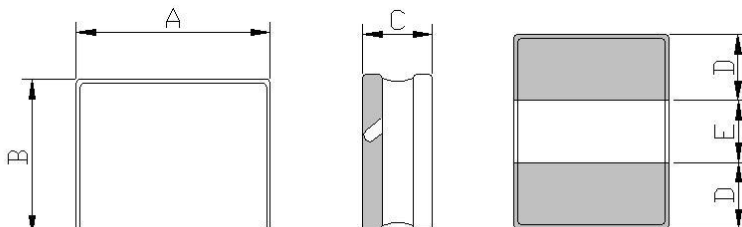
AHP252008FA-SERIES

1. Features

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



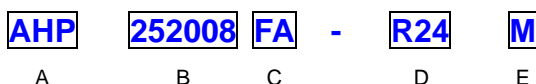
2. Dimension



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
AHP252008FA	2.5 -0.1/+0.2	2.0 -0.1/+0.2	0.8Max	0.75 ref.	1.00 ref.

Units: mm

3. Part Numbering



- A: Series
 B: Dimension
 C: Lead Free Material
 D: Inductance R24=0.24uH
 E: Inductance Tolerance M=±20%

4. Specification

TAI-TECH Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (Hz)	DCR (Ω) typ.	DCR (Ω) Max.	I sat (A) typ.	I sat (A) Max.	I rms (A) typ	I rms (A) MAX
AHP252008FA-R24M	0.24	±20	1V/1M	0.028	0.033	6.00	5.00	4.80	4.30
AHP252008FA-R33M	0.33	±20	1V/1M	0.033	0.039	5.50	4.50	4.30	3.80
AHP252008FA-R47M	0.47	±20	1V/1M	0.040	0.048	5.00	4.00	3.80	3.30
AHP252008FA-R68M	0.68	±20	1V/1M	0.055	0.066	4.80	3.80	3.20	2.80
AHP252008FA-1R0M	1.0	±20	1V/1M	0.065	0.078	3.80	3.30	2.90	2.60
AHP252008FA-1R5M	1.5	±20	1V/1M	0.090	0.108	3.30	2.80	2.60	2.30
AHP252008FA-2R2M	2.2	±20	1V/1M	0.120	0.144	2.50	2.00	2.30	2.00
AHP252008FA-3R3M	3.3	±20	1V/1M	0.200	0.240	2.30	1.80	2.00	1.70
AHP252008FA-4R7M	4.7	±20	1V/1M	0.260	0.312	1.80	1.50	1.70	1.40
AHP252008FA-6R8M	6.8	±20	1V/1M	0.380	0.456	1.50	1.20	1.40	1.20
AHP252008FA-100M	10.0	±20	1V/1M	0.570	0.684	1.10	0.90	1.10	0.90

Note:

Isat : Based on inductance change ($\Delta L/L0 : \leq 30\%$) @ ambient temp. 25°C

Irms : Based on temperature rise ($\Delta T : 40^{\circ}C.$) Max

Measurement board data

Irms1

Material : FR4

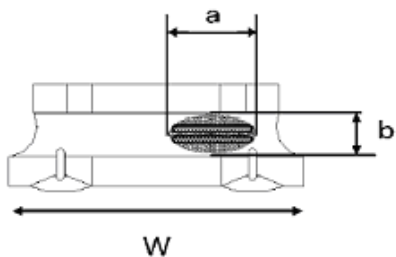
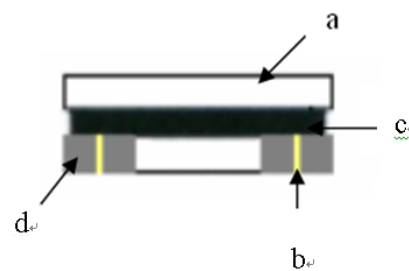
Board dimensions : 100 X 50 X 1.6t mm

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

Pattern thickness : 50 μm

5. Material List

No.	Description	Specification
a.	Core	Metal Core
b.	Wire	Enameled Copper Wire
c.	Glue	Epoxy with magnetic powder
d.	Terminal	Ag/Ni/Sn



Appearance of exposed wire tolerance limit :

1. Width direction (dimension a) : Acceptable when $a \leq w/2$
Nonconforming when $a > w/2$
2. Length direction (dimension b) : Dimension b is not specified.
3. The total area of exposed wire occurring to each sides is not greater than 50% of coating resin area, and is acceptable.