Power Inductor

AHP121008RA-SERIES

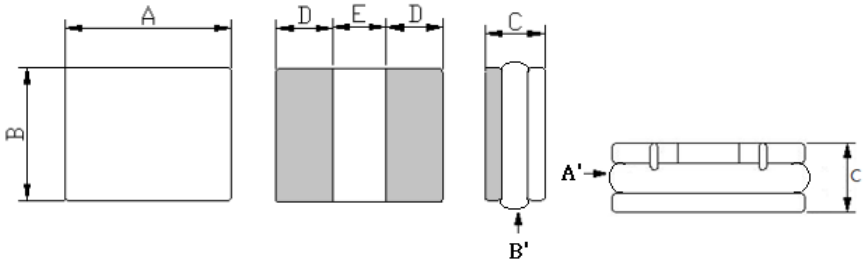
1. Features

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)

Halogen-free

RoHS

2. Dimension



Series	A(mm)	A'(mm)	B(mm)	B'(mm)	C(mm)	D(mm)	E(mm)
AHP121008RA	1.2 ± 0.2	1.5 Max	1.0 ± 0.2	1.3 Max	0.8Max	0.40 ref.	0.40 ref.

Units: mm

3. Part Numbering

AHP	121008	RA	-	2R2	M
A	B	C		D	E

A: Series
B: Dimension
C: Lead Free Material
D: Inductance 2R2=2.2uH
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
AHP121008RA-R24M	0.24	±20	1V/1M	0.075	0.090	4.00	3.50	2.80	2.30
AHP121008RA-R33M	0.33	±20	1V/1M	0.095	0.114	3.50-	3.00	2.50	2.10
AHP121008RA-R47M	0.47	±20	1V/1M	0.120	0.144	3.00	2.50	2.10	1.70
AHP121008RA-R68M	0.68	±20	1V/1M	0.170	0.204	2.00	1.50	1.80	1.50
AHP121008RA-1R0M	1.0	±20	1V/1M	0.190	0.228	1.50	1.20	1.50	1.40
AHP121008RA-1R5M	1.5	±20	1V/1M	0.270	0.324	1.30	1.10	1.30	1.10
AHP121008RA-2R2M	2.2	±20	1V/1M	0.480	0.576	1.25	1.05	1.00	0.85
AHP121008RA-3R3M	3.3	±20	1V/1M	0.750	0.900	1.15	0.90	0.85	0.70
AHP121008RA-4R7M	4.7	±20	1V/1M	1.100	1.320	0.90	0.70	0.65	0.55
AHP121008RA-6R8M	6.8	±20	1V/1M	1.750	2.100	0.65	0.55	0.50	0.45
AHP121008RA-100M	10.0	±20	1V/1M	2.000	2.400	0.50	0.40	0.45	0.40

Note:

Isat：Based on inductance change （△L/L0：≦30%）@ ambient temp. 25℃

Irms：Based on temperature rise （△T：40℃.）Max

Measurement board data

Irms

Material : FR4

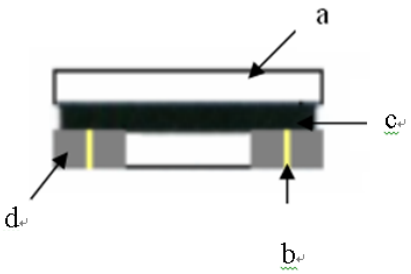
Board dimensions : 100 X 50 X 1.6t mm

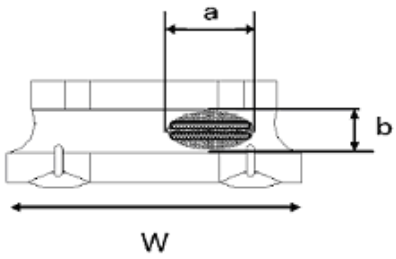
Pattern dimensions: 45 X 30 mm (Double side board)

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≦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.