

Power Inductor

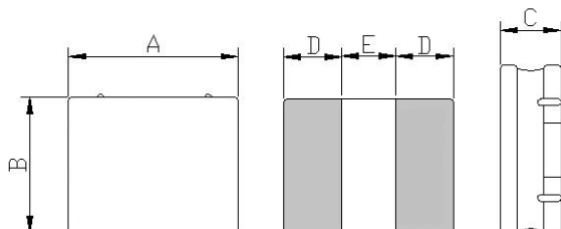
AHP322508RA-SERIES

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)



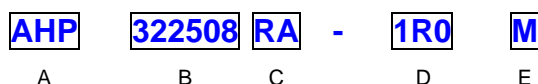
2. Dimension



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
AHP322508RA	3.2 ± 0.2	2.5 ± 0.2	0.8 Max	0.95 ref.	1.30 ref.

Units: mm

3. Part Numbering



A: Series

B: Dimension

C: Lead Free

Material

D: Inductance

1R0=1.0uH

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
AHP322508RA-R24M	0.24	±20	1V/1M	0.025	0.030	8.00	7.00	6.00	5.00
AHP322508RA-R33M	0.33	±20	1V/1M	0.035	0.042	7.00	6.00	5.50	4.50
AHP322508RA-R47M	0.47	±20	1V/1M	0.050	0.060	6.00	5.00	4.30	3.80
AHP322508RA-R68M	0.68	±20	1V/1M	0.065	0.078	5.50	4.50	3.80	3.30
AHP322508RA-1R0M	1.0	±20	1V/1M	0.085	0.102	5.00	4.00	3.30	3.00
AHP322508RA-1R5M	1.5	±20	1V/1M	0.110	0.132	4.50	3.50	2.80	2.50
AHP322508RA-2R2M	2.2	±20	1V/1M	0.170	0.204	4.00	3.00	2.30	2.00
AHP322508RA-3R3M	3.3	±20	1V/1M	0.250	0.300	3.00	2.00	2.00	1.70
AHP322508RA-4R7M	4.7	±20	1V/1M	0.380	0.456	2.80	1.80	1.50	1.30
AHP322508RA-6R8M	6.8	±20	1V/1M	0.530	0.636	2.50	1.50	1.30	1.10
AHP322508RA-100M	10.0	±20	1V/1M	0.760	0.912	1.80	1.30	1.10	0.90

Note:

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

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

Measurement board data

Irms

Material : FR4

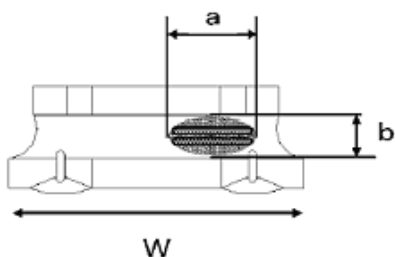
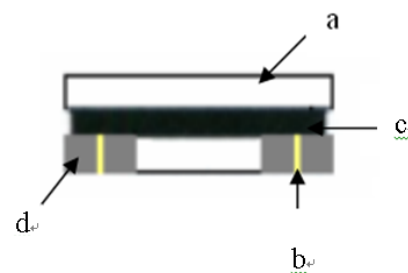
Board dimensions : 100 X 50 X 1.6t mm

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 $a \leq w/2$
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.