

Power Inductor

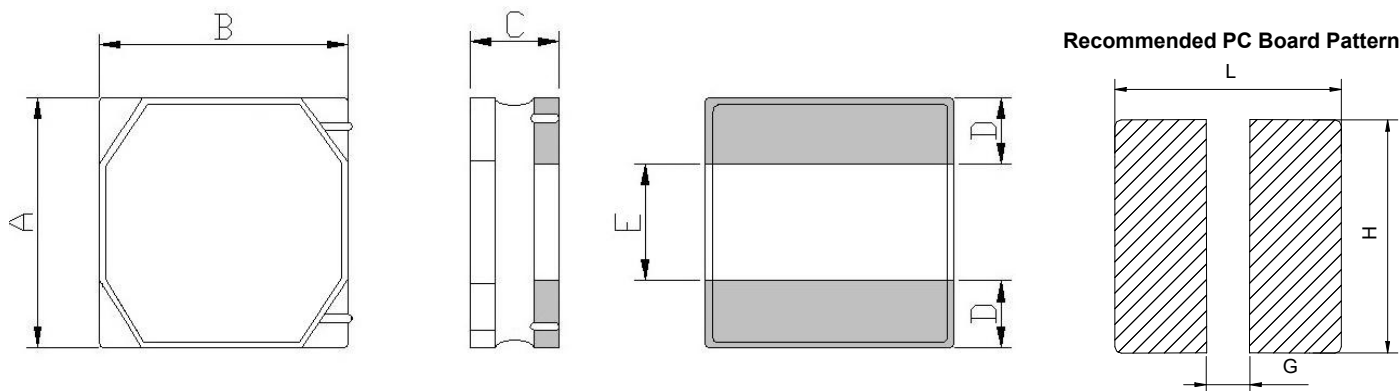
AHP3008RA-SERIES

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)
AHP3008RA	3.0±0.2	3.0±0.2	0.7±0.1	1.0 ref.	1.0 ref.

Units: mm

L(mm)	G(mm)	H(mm)
3.2	1.0	3.2

3. Part Numbering

AHP
3008
RA
-
6R8
M

A: Series

B: Dimension

C: Lead Free

D: Inductance

6R8=6.8uH

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)	I rms (A)
AHP3008RA-R24M	0.24	±20%	1V100K	0.040	0.048	8.00	4.50
AHP3008RA-R33M	0.33	±20%	1V100K	0.050	0.060	7.00	4.00
AHP3008RA-R47M	0.47	±20%	1V100K	0.075	0.090	6.00	3.40
AHP3008RA-R68M	0.68	±20%	1V100K	0.090	0.108	5.50	3.10
AHP3008RA-1R0M	1.0	±20%	1V100K	0.100	0.120	5.00	2.80
AHP3008RA-1R5M	1.5	±20%	1V100K	0.120	0.144	4.50	2.60
AHP3008RA-2R2M	2.2	±20%	1V100K	0.210	0.252	4.00	1.95
AHP3008RA-3R3M	3.3	±20%	1V100K	0.320	0.384	3.00	1.60
AHP3008RA-4R7M	4.7	±20%	1V100K	0.430	0.516	2.50	1.40
AHP3008RA-6R8M	6.8	±20%	1V100K	0.400	0.460	1.60	1.30
AHP3008RA-100M	10.0	±20%	1V100K	0.860	0.980	1.50	1.00

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 less value which is Irms or Isat.

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 μ m

5. Typical Performance Curves

