

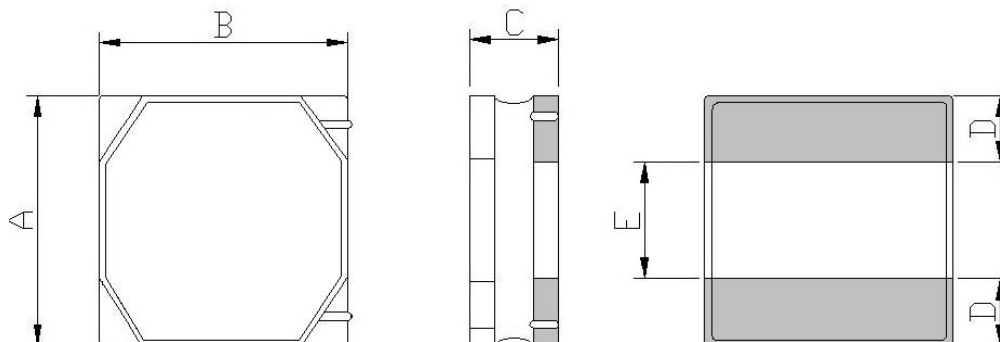
**Power Inductor** **AHP3008RA-SERIES**

**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).



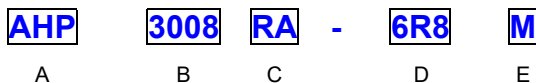
**2. Dimension**



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

**3. Part Numbering**



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

### 5. Typical Performance Curves

