

# Power Inductor

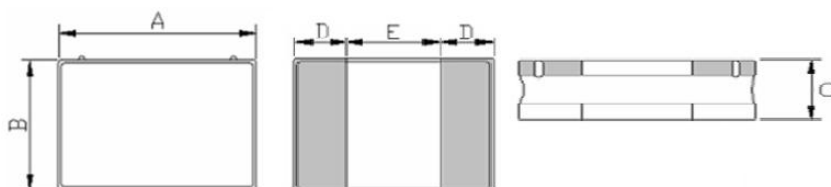
**AHP201608RA-SERIES**

## 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)
AHP201608RA	2.0 -0.1/+0.2	1.6 -0.1/+0.2	0.8Max	0.50 ref.	1.00 ref.

Units: mm

## 3. Part Numbering

AHP
201608
RA
-
1R0
M

- 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 ( $\Omega$ ) typ.	DCR ( $\Omega$ ) Max.	I sat (A)	I rms (A)
AHP201608RA-R24M	0.24	$\pm 20$	1V/1M	0.040	0.048	7.00	4.00
AHP201608RA-R33M	0.33	$\pm 20$	1V/1M	0.055	0.065	6.00	3.50
AHP201608RA-R47M	0.47	$\pm 20$	1V/1M	0.070	0.084	5.00	3.00
AHP201608RA-R68M	0.68	$\pm 20$	1V/1M	0.085	0.100	4.00	2.80
AHP201608RA-1R0M	1.0	$\pm 20$	1V/1M	0.110	0.130	3.00	2.20
AHP201608RA-1R5M	1.5	$\pm 20$	1V/1M	0.160	0.190	2.80	2.00
AHP201608RA-2R2M	2.2	$\pm 20$	1V/1M	0.220	0.260	2.50	1.80
AHP201608RA-3R3M	3.3	$\pm 20$	1V/1M	0.380	0.450	1.80	1.20
AHP201608RA-4R7M	4.7	$\pm 20$	1V/1M	0.550	0.660	1.70	1.10
AHP201608RA-6R8M	6.8	$\pm 20$	1V/1M	0.780	0.940	1.30	0.85
AHP201608RA-100M	10	$\pm 20$	1V/1M	0.800	0.960	0.90	0.80

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

Irms1

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 Curve

