

# Power Inductor

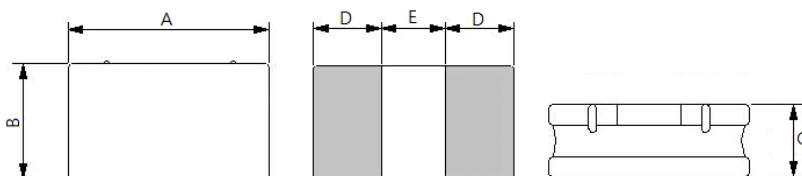
**AHP201208RA-SERIES**

## 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)
AHP201208RA	2.0±0.2	1.2±0.2	0.80Max	0.50 ref.	1.00 ref.

## 3. Part Numbering

AHP
201208
RA
-
2R2
M

- 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)	I rms (A)
AHP201208RA-R24M	0.24	±20	1V/1M	0.036	0.043	4.50	3.50
AHP201208RA-R47M	0.47	±20	1V/1M	0.060	0.072	3.50	2.50
AHP201208RA-R68M	0.68	±20	1V/1M	0.130	0.156	3.00	1.80
AHP201208RA-1R0M	1.00	±20	1V/1M	0.170	0.204	2.50	1.70
AHP201208RA-1R5M	1.50	±20	1V/1M	0.260	0.312	2.20	1.30
AHP201208RA-2R2M	2.20	±20	1V/1M	0.400	0.480	1.50	1.00
AHP201208RA-3R3M	3.30	±20	1V/1M	0.480	0.576	1.20	0.90
AHP201208RA-4R7M	4.70	±20	1V/1M	0.800	0.960	1.10	0.70
AHP201208RA-6R8M	6.80	±20	1V/1M	1.200	1.440	0.90	0.60
AHP201208RA-100M	10.0	±20	1V/1M	1.800	2.160	0.70	0.45

## Note:

Heat Rated Current (I<sub>rms</sub>) will cause the coil temperature rise approximately  $\Delta t$  of 40°C.

Saturation Current (I<sub>sat</sub>) will cause L<sub>0</sub> to drop approximately 30%.

## Measurement board data

I<sub>rms</sub>

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

### 9. Typical Performance Curves

