

# Power Inductor

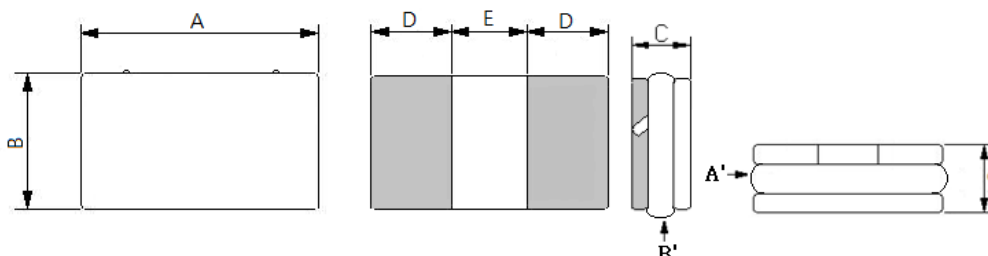
AHP201208FA-SERIES

## 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)



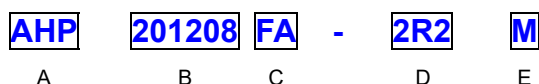
## 2. Dimension



| Series      | A(mm)     | A'(mm)  | B(mm)     | B'(mm)  | C(mm)   | D(mm)     | E(mm)     |
|-------------|-----------|---------|-----------|---------|---------|-----------|-----------|
| AHP201208FA | 2.0 ± 0.2 | 2.3 Max | 1.2 ± 0.2 | 1.5 Max | 0.80Max | 0.50 ref. | 1.00 ref. |

Units: mm

## 3. Part Numbering



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) |
|----------------------|-----------------|---------------|---------------------|--------------|--------------|-----------|-----------|
| AHP201208FA-R24M     | 0.24            | ±20           | 1V/1M               | 0.028        | 0.033        | 4.50      | 4.70      |
| AHP201208FA-R33M     | 0.33            | ±20           | 1V/1M               | 0.036        | 0.043        | 3.50      | 4.30      |
| AHP201208FA-R47M     | 0.47            | ±20           | 1V/1M               | 0.045        | 0.054        | 3.30      | 4.00      |
| AHP201208FA-R68M     | 0.68            | ±20           | 1V/1M               | 0.065        | 0.078        | 3.10      | 3.30      |
| AHP201208FA-1R0M     | 1.0             | ±20           | 1V/1M               | 0.100        | 0.120        | 2.50      | 2.30      |
| AHP201208FA-1R5M     | 1.5             | ±20           | 1V/1M               | 0.150        | 0.180        | 2.20      | 2.00      |
| AHP201208FA-2R2M     | 2.2             | ±20           | 1V/1M               | 0.210        | 0.250        | 1.90      | 1.60      |
| AHP201208FA-3R3M     | 3.3             | ±20           | 1V/1M               | 0.240        | 0.288        | 1.20      | 1.50      |

Note:

Isat : Saturation Current (Isat) will cause L0 to drop approximately 30%.

I rms : Heat Rated Current (I rms) will cause the coil temperature rise approximately ΔT of 40°C

Measurement board data

I rms

Material : FR4

Board dimensions : 100 X 50 X 1.6t mm

Pattern dimensions: 45 X 30 mm (Double side board)

Pattern thickness : 50 μm