

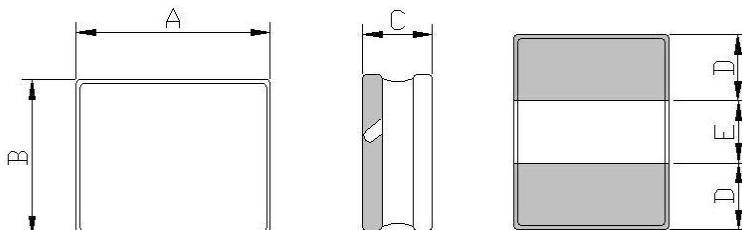
**Power Inductor** **AHP252008FA-SERIES**

**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)



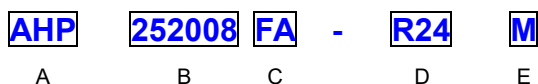
**2. Dimension**



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
AHP252008FA	2.5 -0.1/+0.2	2.0 -0.1/+0.2	0.8Max	0.75 ref.	1.00 ref.

Units: mm

**3. Part Numbering**



- A: Series
- B: Dimension
- C: Lead Free                      Material
- D: Inductance                      R24=0.24uH
- E: Inductance Tolerance          M=±20%

## 4. Specification

TAI-TECH Part Number	Inductance ( $\mu$ H)	Tolerance (%)	Test Frequency (Hz)	DCR ( $\Omega$ ) typ.	DCR ( $\Omega$ ) Max.	I sat (A)	I rms (A)
AHP252008FA-R24M	0.24	$\pm 20$	1V/1M	0.028	0.033	6.00	4.80
AHP252008FA-R33M	0.33	$\pm 20$	1V/1M	0.033	0.039	5.50	4.30
AHP252008FA-R47M	0.47	$\pm 20$	1V/1M	0.040	0.048	5.00	3.80
AHP252008FA-R68M	0.68	$\pm 20$	1V/1M	0.055	0.066	4.80	3.20
AHP252008FA-1R0M	1.0	$\pm 20$	1V/1M	0.065	0.078	3.80	2.90
AHP252008FA-1R5M	1.5	$\pm 20$	1V/1M	0.090	0.108	3.30	2.60
AHP252008FA-2R2M	2.2	$\pm 20$	1V/1M	0.120	0.144	2.50	2.30
AHP252008FA-3R3M	3.3	$\pm 20$	1V/1M	0.200	0.240	2.30	2.00
AHP252008FA-4R7M	4.7	$\pm 20$	1V/1M	0.260	0.312	1.80	1.70
AHP252008FA-6R8M	6.8	$\pm 20$	1V/1M	0.380	0.456	1.50	1.40
AHP252008FA-100M	10.0	$\pm 20$	1V/1M	0.570	0.684	1.10	1.10

Note:

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

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

Rated DC Current : The less value which is I<sub>rms</sub> or I<sub>sat</sub>.

Measurement board data

I<sub>rms1</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