

# Power Inductor

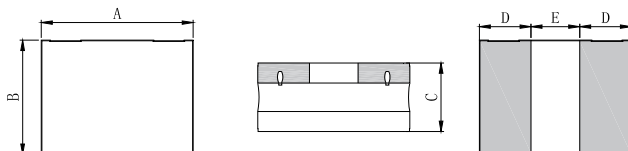
**AHP252010RA-SERIES**

## 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)
AHP252010RA	2.50±0.20	2.00±0.20	0.90±0.10	0.80±0.20	0.95±0.20

## 3. Part Numbering

**AHP**   **252010**   **RA**   -   **R24**   **M**

A                      B                      C                      D                      E

A: Series

B: Dimension

C: Lead Free

Material

D: Inductance

R24=0.24uH; 1R5=1.50uH

E: Inductance Tolerance

K=±10%; M=±20%; Y=±30%

## 4. Specification

TAI-TECH Part Number	Inductance (uH)	I rms (A)	I sat (A)	DCR (Ω) typ.	DCR (Ω) Max.
AHP252010RA-R24M	0.24	5.5	7.5	0.022	0.028
AHP252010RA-R33M	0.33	4.8	6.0	0.025	0.030
AHP252010RA-R47M	0.47	4.3	5.5	0.035	0.040
AHP252010RA-R56M	0.56	4.0	4.8	0.040	0.048
AHP252010RA-R68M	0.68	3.8	4.4	0.045	0.054
AHP252010RA-1R0M	1.00	3.3	3.6	0.062	0.071
AHP252010RA-1R2M	1.20	2.9	3.2	0.070	0.080
AHP252010RA-1R5M	1.50	2.7	2.9	0.080	0.090
AHP252010RA-2R2M	2.20	2.3	2.4	0.120	0.132
AHP252010RA-3R3M	3.30	1.7	2.1	0.190	0.216
AHP252010RA-4R7M	4.70	1.4	1.7	0.245	0.276
AHP252010RA-6R8M	6.80	1.2	1.50	0.330	0.383
AHP252010RA-8R2M	8.20	1.10	1.40	0.410	0.476
AHP252010RA-100M	10.0	1.00	1.30	0.53	0.61

## Note:

Inductance Test Frequency 1MHz/1V

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%.

I<sub>rms</sub> Testing :

Temperature rise is highly dependent on many factors including pcb land pattern , Circuit design, component placement, frequency, cooling system, trace size , and proximity to other components.....etc , There fore temperature rise should be verified in application conditions .

### 5. Typical Performance Curves

