

# Power Inductor

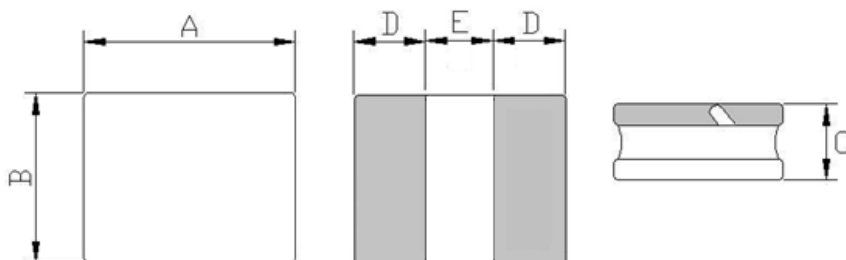
AHP252010NV-SERIES

## 1. Features

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
3. High reliability -Reliability test comply with AEC-Q200
4. Operating temperature -55~+125°C (Including self - temperature rise)



## 2. Dimension



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
AHP252010NV	2.5 ± 0.2	2.0 ± 0.2	1.0Max	0.75 ref.	1.00 ref.

Units: mm

## 3. Part Numbering

**AHP** **252010** **N** **V** - **2R2** **M**

A B C D E F

- A: Series  
 B: Dimension  
 C: Lead Free  
 D: Category Code  
 E: Inductance  
 F: Inductance Tolerance
- Material  
 V=Vehicle  
 2R2=2.2uH  
 M=±20%

## 4. Specification

TAI-TECH Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (Hz)	DCR (Ω) typ.	DCR (Ω) Max.	I sat (A) typ.	I sat (A) Max.	I rms (A) typ	I rms (A) MAX
AHP252010NV-R24M	0.24	±20	1V/1M	0.022	0.028	7.00	6.00	4.50	4.00
AHP252010NV-R33M	0.33	±20	1V/1M	0.023	0.029	5.50	4.80	4.30	3.80
AHP252010NV-R47M	0.47	±20	1V/1M	0.030	0.036	5.20	4.50	4.00	3.50
AHP252010NV-R68M	0.68	±20	1V/1M	0.038	0.045	4.00	3.50	3.50	3.00
AHP252010NV-1R0M	1.0	±20	1V/1M	0.053	0.063	3.50	3.10	3.00	2.50
AHP252010NV-1R5M	1.5	±20	1V/1M	0.080	0.096	3.00	2.60	2.50	2.00
AHP252010NV-2R2M	2.2	±20	1V/1M	0.105	0.126	2.20	1.90	2.10	1.80
AHP252010NV-3R3M	3.3	±20	1V/1M	0.195	0.235	1.90	1.60	1.40	1.20
AHP252010NV-4R7M	4.7	±20	1V/1M	0.230	0.276	1.60	1.30	1.30	1.10

Note:

Isat : Based on inductance change ( $\Delta L/L0 : \leq 30\%$ ) @ ambient temp. 25°C

Irms : Based on temperature rise ( $\Delta T : 40^\circ\text{C}$ ) Max

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  $\mu\text{m}$

