

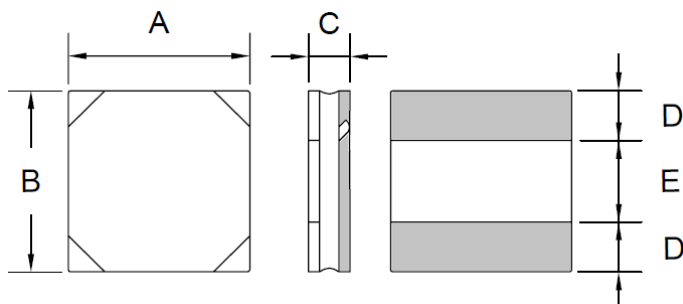
Power Inductor AHP3012HV-SERIES

1. Features

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



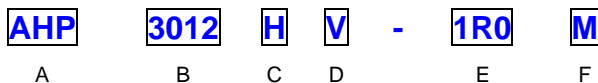
2. Dimension



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
AHP3012HV	3.0±0.2	3.0±0.2	1.2max.	1.0 ref.	1.0 ref.

Units: mm

3. Part Numbering



- A: Series
- B: Dimension
- C: Lead Free
- D: Category Code V=Vehicle
- E: Inductance 1R0=1.0uH
- F: Inductance Tolerance M=±20%

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.
AHP3012HV-R33M	0.33	±20%	1V/1M	0.020	0.024	9.00	7.00	5.50	4.50
AHP3012HV-R47M	0.47	±20%	1V/1M	0.025	0.030	7.50	6.50	5.20	4.20
AHP3012HV-R68M	0.68	±20%	1V/1M	0.032	0.038	6.50	5.50	4.50	3.70
AHP3012HV-1R0M	1.0	±20%	1V/1M	0.042	0.049	5.20	4.50	4.00	3.50
AHP3012HV-1R5M	1.5	±20%	1V/1M	0.060	0.072	4.50	4.00	3.50	3.00
AHP3012HV-2R2M	2.2	±20%	1V/1M	0.090	0.108	3.60	3.00	2.80	2.30
AHP3012HV-3R3M	3.3	±20%	1V/1M	0.130	0.156	3.00	2.50	2.10	1.70
AHP3012HV-4R7M	4.7	±20%	1V/1M	0.180	0.216	2.60	2.30	1.80	1.50
AHP3012HV-6R8M	6.8	±20%	1V/1M	0.250	0.300	2.20	1.90	1.50	1.30
AHP3012HV-100M	10.0	±20%	1V/1M	0.290	0.350	1.50	1.30	1.40	1.20

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

Material : FR4

Board dimensions : 100 X 50 X 1.6t mm

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

Pattern thickness : 50 μm

