

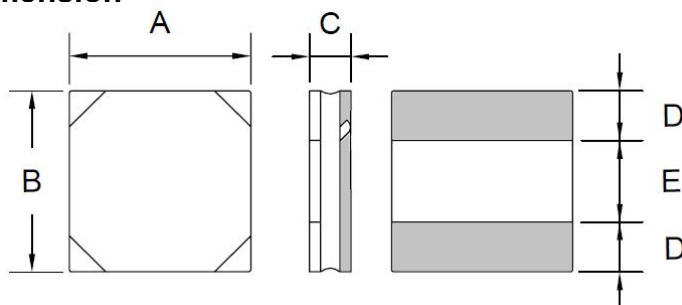
Power Inductor **AHP4012HF-SERIES**

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).



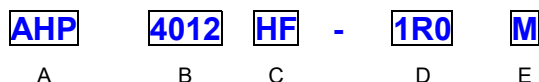
2. Dimension



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
AHP4012HF	4.0±0.2	4.0±0.2	1.2 max.	1.4±0.25	1.2±0.25

Units: mm

3. Part Numbering



- A: Series
- B: Dimension
- C: Lead Free
- D: Inductance 1R0=1.0uH
- 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)
AHP4012HF-R47M	0.47	$\pm 20\%$	1V100K	0.028	0.033	10.00	6.00
AHP4012HF-R68M	0.68	$\pm 20\%$	1V100K	0.036	0.043	8.00	5.00
AHP4012HF-1R0M	1.0	$\pm 20\%$	1V100K	0.040	0.050	6.50	3.80
AHP4012HF-1R5M	1.5	$\pm 20\%$	1V100K	0.050	0.060	5.60	3.70
AHP4012HF-2R2M	2.2	$\pm 20\%$	1V100K	0.065	0.078	4.50	3.40
AHP4012HF-3R3M	3.3	$\pm 20\%$	1V100K	0.100	0.120	4.00	2.80
AHP4012HF-4R7M	4.7	$\pm 20\%$	1V100K	0.125	0.145	3.00	2.30
AHP4012HF-6R8M	6.8	$\pm 20\%$	1V100K	0.150	0.180	2.20	2.10
AHP4012HF-100M	10.0	$\pm 20\%$	1V100K	0.280	0.330	2.00	1.60

Note:

I_{sat} : Saturation Current (I_{sat}) 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.

Rated DC Current : The less value which is I_{rms} or I_{sat}.

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 μ m

5. Typical Performance Curves

