

Power Inductor

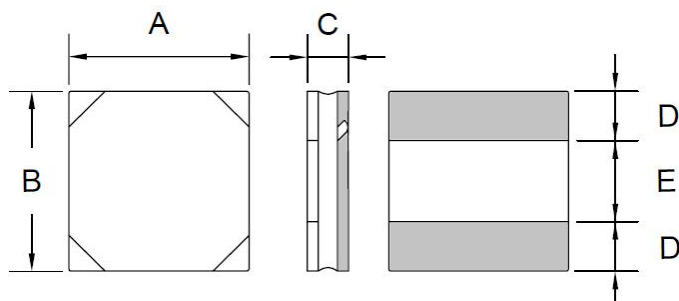
AHP4010HF-SERIES

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).



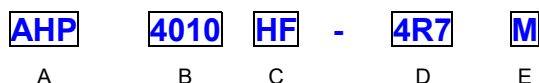
2. Dimension



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
AHP4010HF	4.0±0.2	4.0±0.2	1.0 max.	1.4±0.25	1.2±0.25

Units: mm

3. Part Numbering



A: Series

B: Dimension

C: Lead Free

D: Inductance

4R7=4.7uH

E: Inductance Tolerance

M=±20%

4. Specification

TAI-TECH Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (Hz)	DCR (Ω) tpy.	DCR (Ω) Max.	I sat (A)	I rms (A)
AHP4010HF-R47M	0.47	$\pm 20\%$	1V100K	0.038	0.045	8.00	4.50
AHP4010HF-R68M	0.68	$\pm 20\%$	1V100K	0.050	0.060	7.00	4.00
AHP4010HF-1R0M	1.0	$\pm 20\%$	1V100K	0.059	0.069	6.00	3.50
AHP4010HF-1R5M	1.5	$\pm 20\%$	1V100K	0.062	0.075	4.00	3.50
AHP4010HF-2R2M	2.2	$\pm 20\%$	1V100K	0.075	0.090	3.10	3.00
AHP4010HF-3R3M	3.3	$\pm 20\%$	1V100K	0.115	0.140	2.80	2.50
AHP4010HF-4R7M	4.7	$\pm 20\%$	1V100K	0.200	0.240	2.50	2.10
AHP4010HF-6R8M	6.8	$\pm 20\%$	1V100K	0.300	0.360	2.10	1.60
AHP4010HF-100M	10.0	$\pm 20\%$	1V100K	0.440	0.510	1.80	1.40

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 μm

5. Typical Performance Curves

