

Power Inductor

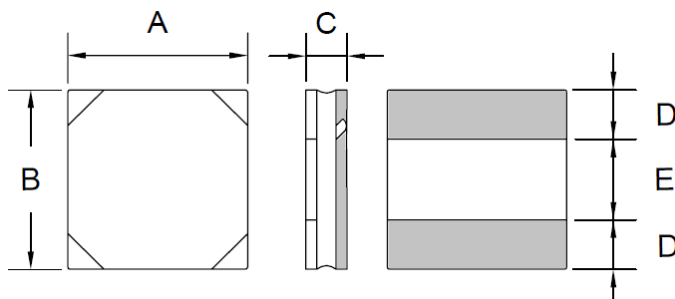
AHP4010HF-SERIES

1. Features

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
3. Operating temperature : -40~+125℃ (Including self - temperature rise)

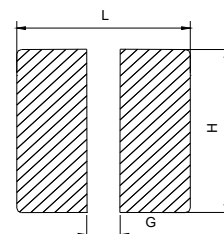


2. Dimension



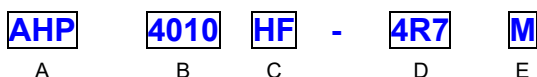
Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
AHP4010HF	4.0±0.2	4.0±0.2	1.0 max	1.2 ref	1.6 ref

Recommended Land pattern



L(mm)	G(mm)	H(mm)
4.2	1.2	4.2

3. Part Numbering



A: Series

B: Dimension

C: Lead Free

D: Inductance

4R7=4.70uH

E: Inductance Tolerance

K=± 10%, L=± 15%, M=± 20%, Y=± 30%.

4. Specification

Part Number	Inductance (uH)±20% @ 0 A	Test Frequency (Hz)	I rms (A)		I sat (A)		DCR (Ω)	
			Typ	Max	Typ	Max	Typ	Max
AHP4010HF-R47M	0.47	1V100K	4.50	4.00	8.00	7.00	0.038	0.045
AHP4010HF-R68M	0.68	1V100K	4.00	3.50	7.00	6.00	0.050	0.060
AHP4010HF-1R0M	1.0	1V100K	3.50	3.20	6.00	5.00	0.059	0.069
AHP4010HF-1R5M	1.5	1V100K	3.50	3.00	4.00	3.50	0.062	0.075
AHP4010HF-2R2M	2.2	1V100K	3.00	2.50	3.10	2.60	0.075	0.090
AHP4010HF-3R3M	3.3	1V100K	2.50	2.00	2.80	2.30	0.115	0.140
AHP4010HF-4R7M	4.7	1V100K	2.10	1.70	2.50	2.00	0.200	0.240
AHP4010HF-6R8M	6.8	1V100K	1.60	1.40	2.10	1.80	0.300	0.360
AHP4010HF-100M	10.0	1V100K	1.40	1.20	1.80	1.50	0.440	0.510

Note:

Isat: Saturation Current (Isat) will cause L0 to drop approximately 30%.

Irms: Heat Rated Current (Irms) will cause the coil temperature rise approximately Δt of 40℃

Rated DC current: The lower value of Irms and Isat.

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

10. Typical Performance Curves

