

Power Inductor

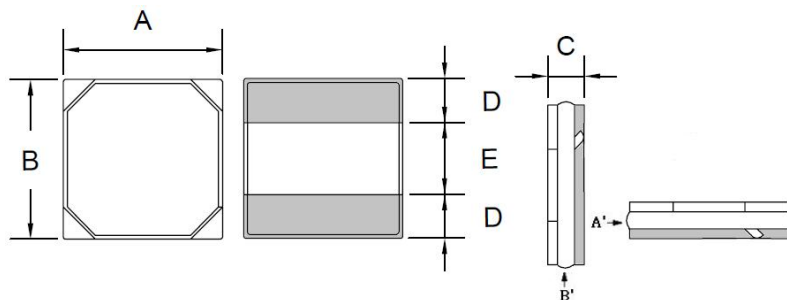
AHP3008FA-SERIES

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).



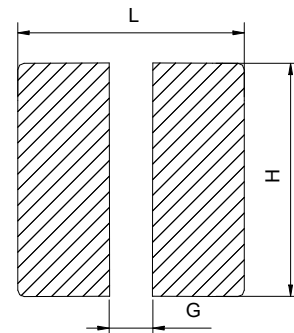
2. Dimension



Series	A(mm)	A'(mm)	B(mm)	B'(mm)	C(mm)	D(mm)	E(mm)
AHP3008FA	3.0±0.2	3.3 Max	3.0±0.2	3.3 Max	0.7±0.1	1.0 ref.	1.0 ref.

Units: mm

Recommended PC Board Pattern



L(mm)	G(mm)	H(mm)
3.2	1.0	3.2

3. Part Numbering

AHP
3008
FA
-
2R2
M

A: Series

B: Dimension

C: Lead Free

D: Inductance

2R2=2.2uH

E: Inductance Tolerance

M=±20%

4. Specification

TAI-TECH Part Number	Inductance (μ H)	Tolerance (%)	Test Frequency (Hz)	DCR (Ω) typ.	DCR (Ω) Max	I sat (A)	I rms (A)
AHP3008FA-R24M	0.24	$\pm 20\%$	1V100K	0.035	0.042	8.00	5.00
AHP3008FA-R33M	0.33	$\pm 20\%$	1V100K	0.050	0.060	7.50	4.30
AHP3008FA-R47M	0.47	$\pm 20\%$	1V100K	0.055	0.066	6.50	3.90
AHP3008FA-R68M	0.68	$\pm 20\%$	1V100K	0.080	0.096	5.50	3.30
AHP3008FA-1R0M	1.0	$\pm 20\%$	1V100K	0.095	0.114	4.80	3.10
AHP3008FA-1R5M	1.5	$\pm 20\%$	1V100K	0.115	0.138	4.00	2.90
AHP3008FA-2R2M	2.2	$\pm 20\%$	1V100K	0.180	0.216	3.50	2.30
AHP3008FA-3R3M	3.3	$\pm 20\%$	1V100K	0.280	0.336	3.00	1.80
AHP3008FA-4R7M	4.7	$\pm 20\%$	1V100K	0.340	0.408	2.50	1.55
AHP3008FA-6R8M	6.8	$\pm 20\%$	1V100K	0.380	0.456	1.60	1.45
AHP3008FA-100M	10.0	$\pm 20\%$	1V100K	0.750	0.900	1.50	1.15

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°C.

Rated DC Current : The less value which is Irms or Isat.

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Measurement board data

Irms

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

