Inductor For Power Line

AHP160808FA-SERIES

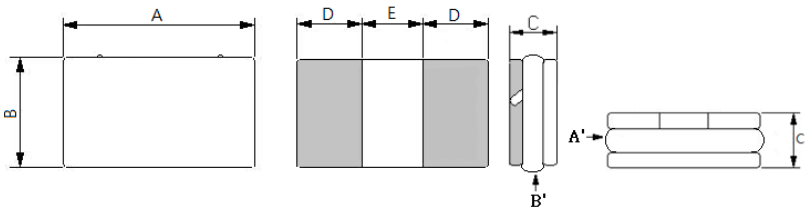
1. Features

1. This specification applies Low Profile and Low DCR .
2. It can be applied to the Bluetooth device and other electronic equipment.
3. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
4. Operating temperature -40~+125℃ (Including self - temperature rise)

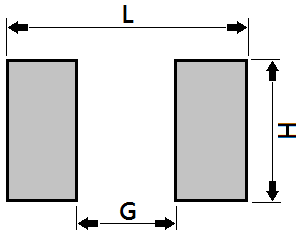
Halogen-free

RoHS

2. Dimension



Recommended PC Board Pattern



Series	A(mm)	A'(mm)	B(mm)	B'(mm)	C(mm)	D(mm)	E(mm)
AHP160808FA	1.6±0.2	1.9 Max	0.8±0.2	1.1 Max	0.8Max	0.50 ref	0.60 ref

L(mm)	G(mm)	H(mm)
1.90	0.60	1.10

3. Part Numbering

AHP	160808	FA	-	R47	M
A	B	C		D	E

A: Series
B: Dimension
C: Lead Free Ferrite
D: Inductance R47=0.47uH
E: Inductance Tolerance M=±20%

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
AHP160808FA-R24M	0.24	1V/1M	2.00	1.80	4.50	4.00	0.075	0.090
AHP160808FA-R33M	0.33	1V/1M	1.60	1.50	4.00	3.50	0.090	0.108
AHP160808FA-R47M	0.47	1V/1M	1.30	1.20	3.50	3.00	0.100	0.120
AHP160808FA-R56M	0.56	1V/1M	1.10	0.90	3.00	2.50	0.110	0.132

Note:

Isat：Saturation Current (Isat) will cause L0 to drop approximately 30%.
Irms：Heat Rated Current (Irms) will cause the coil temperature rise approximately △t of 40℃
Rated DC current: The lower value of Irms and Isat.

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 μm

10. Typical Performance Curves