

Power Inductor

HPC160809TF-SERIES

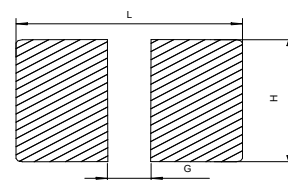
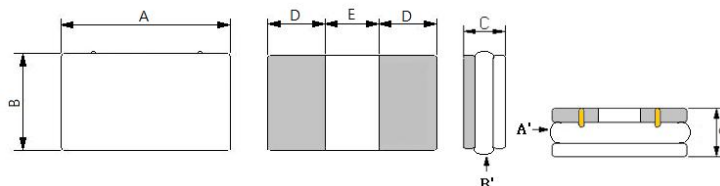
1. Features

1. This specification applies Low Profile (0.95mm(max.)and Low DCR .
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
3. Operating temperature -40~+125°C (Including self - temperature rise)



2. Dimension

Recommended Land pattern



Series	A(mm)	A'(mm)	B(mm)	B'(mm)	C(mm)	D(mm)	E(mm)
HPC160809TF	1.60±0.15	1.90 Max	0.90±0.15	1.10 Max	0.95 Max	0.50 ref	0.60 ref

Units: mm

L(mm)	G(mm)	H(mm)
1.80	0.60	0.96

3. Part Numbering

HPC	160809	TF	-	4R7	M
A	B	C		D	E

- A: Series
 B: Dimension
 C: Lead Free
 D: Inductance
 E: Inductance Tolerance
- Ferrite
 4R7=4.70uH
 K=± 10%, L=± 15%, M=± 20%, Y=± 30%.

4. Specification

Part Number	Inductance (uH) ±20% @ 0 A	Ls/Q Test Frequency (Hz)	I rms (mA)	I sat (mA)	DCR (Ω) ±30%
			Typ	Typ	
HPC160809TF-1R0M	1.00	0.5V/7.9M	900	800	0.12
HPC160809TF-2R2M	2.20	0.5V/7.9M	450	400	0.24
HPC160809TF-4R7M	4.70	0.5V/7.9M	350	300	0.46
HPC160809TF-100M	10.0	0.5V/2.5M	250	200	0.93

Note:

Isat: Saturation Current (Isat) will cause L0 to drop approximately 30%. @ ambient temp. 25°C

Irms: Heat Rated Current (Irms) will cause the coil temperature rise approximately Δ T of 40°C

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

