

HPC SERIES

High Power Planar Chokes for HV Applications

Features

- High power planar chokes for HEV/EV applications
- According AEC-Q200.
- High power management
- Very good inductance stability versus temperature
- Operating frequency up to 250 kHz.
- Operating temperature from -40°C to 125°C
- H class component for operation up to 180°C
- Allows assembly in a cold plate through heat sink under request
- Improved room area
- Possibility of customized outputs
- UL94V-0 material
- RoHS compliant



Application

- Automotive DC/DC converters for HEV/EV systems.
- Industrial high power SMPS

Electrical specifications

Part Number	Inductance ±10%	Freq. (kHz)	DCR MAX (mΩ)	Current I _{rms} (A)	Ripple ΔI _{pp} (A)	Losses @100°C (W)	Weight (kg)
HPC-001	4μH	100	0.6	120	24	13	0,2
HPC-002	2,5μH	150	0.4	165	30	12	0,2

(*) Dedicated to Full Bridge topology

Notes

- (1) All test data are referenced to 25°C ambient temperature
- (2) Continuous operating temperature range must be within -40°C/+125°C (ambient + self heating) under worst case conditions; exposure to 180°C peak is allowed. Thermal index H for all raw materials used.
- (3) Performances are subjected to change according to cooling capability of the cold plate where the component is fixed. It is suggested to test the component at system level to verify its temperature after 30 minutes in the final application.
- (4) Inductance values are measured at 10kHz/0.25V
Less than +/-10% variation on -40°C/+150°C temperature range
- (5) Dielectric strength between windings and core is above 1kV/50Hz/2sec

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Dimensions

