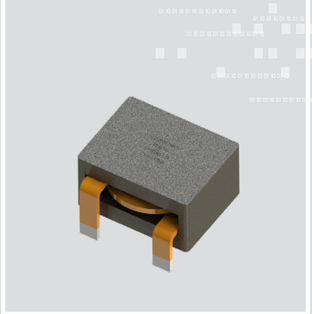
HPC1R8-150

DC Inductor 1.8µH 140Arms

INDUCTIVE COMPONENTS / **HIGH CURRENT DC CHOKE**



APPLICATIONS

- Automotive HV/LV DCDC onboard converters

01 FEATURES

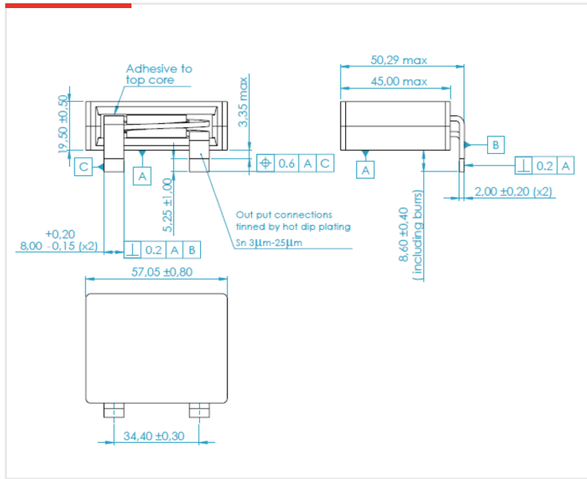
- High power planar output filtering choke
- Tin thickness 3-25µm (section 8 x 2mm).
- UL94 and RoHS materials
- AEC-Q200 qualified
- Weight : approx 220 g.
- Tolerances according to ISO 2768-1m

02 OPERATION

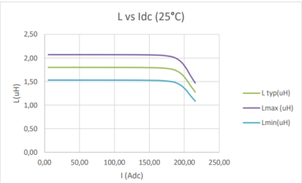
- MAX Operating Voltage: 150Vdc
- Continuos RMS Current (≤ 105 °C): 140 A
- Peak Current (10s, duty 1/6, ≤ 25 °C) 175 A
- Operating/Storage/Ambient Temperature: -40/+150˚C
- Estimated Total Loses (100°C)
- Copper loses DC (140 Arms): 7 W
- Core loses (Iripple=30App @200kHz): 2 W
- Total loses: 9 W

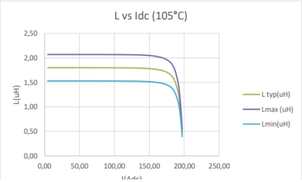
03 SPECIFICATIONS

DIMENSIONS (mm)

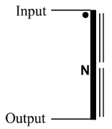


TYPICAL BEHAVIOR





ELECTRICAL DIAGRAM



ELECTRICAL SPECIFICATIONS

INDUCTANCE	
@0A	1.8µH +/-15%
DC RESISTANCE	
@25°C	0,27 mΩ typ +/- 14%
INSULATION RESISTANCE *	
WINDING TO CORE	10 MΩ min, 200 Vac/50 Hz, 2s (serial test)
DIELECTRIC STRENGTH (1) *	
WINDING TO CORE	200Vac 50Hz, 2s, 3 mA

NOTES:

- Inductance measured at 200 kHz / 1 Vac
- **(1)** 1 min for qualification / 2 sec for mass production
- Critical characteristics are indicated by red asterisk (*)