

HIGH POWER INDUCTOR

P7608 Family

Features

- * Lead-free (Pb-free)
- * RoHS compliant
- * High Current (to 30A)
- * Low DCR (to 1mΩ)
- * Foil windings
- * Closed magnetic circuit

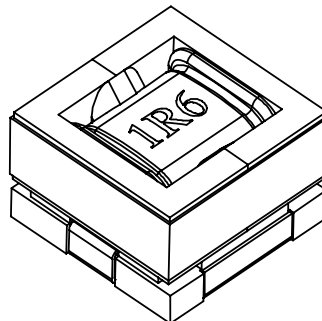
Applications

- * DC-DC Converters
- * Voltage Regulator Modules
- * Distributed Power
- * MPU power supplies
- * Servers
- * Workstations
- * Telecom equipment
- * Notebook and handheld equipment

DESCRIPTION

The P7608 family comprises high-energy-density surface mount inductors. The family employs copper foil windings, giving excellent DC resistance, thermal efficiency and high frequency performance. The core is a closed magnetic circuit to afford magnetic shielding.

The P7608 family is compliant with RoHS Directive 2002/95/EC and supplied in tape and reel packaging, and is suitable for Pb-free and conventional placement and reflow.



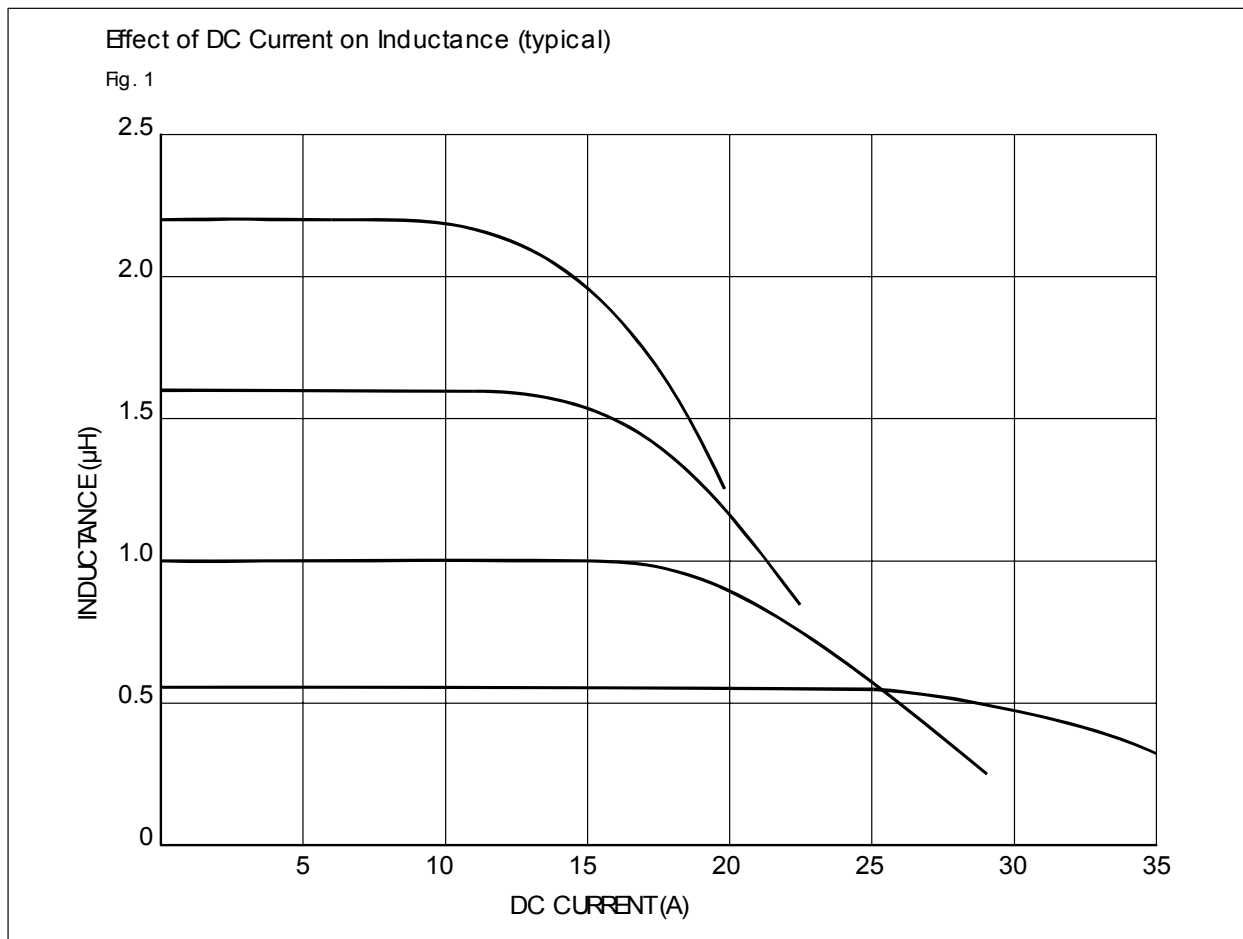
SPECIFICATIONS

Electrical

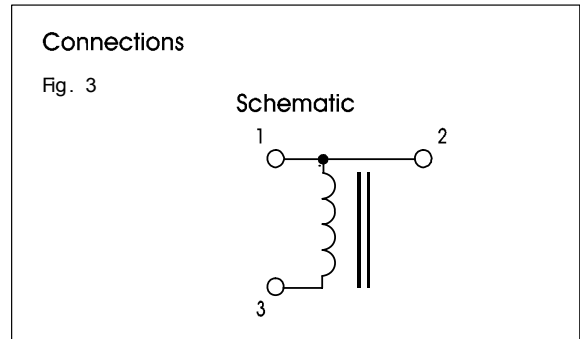
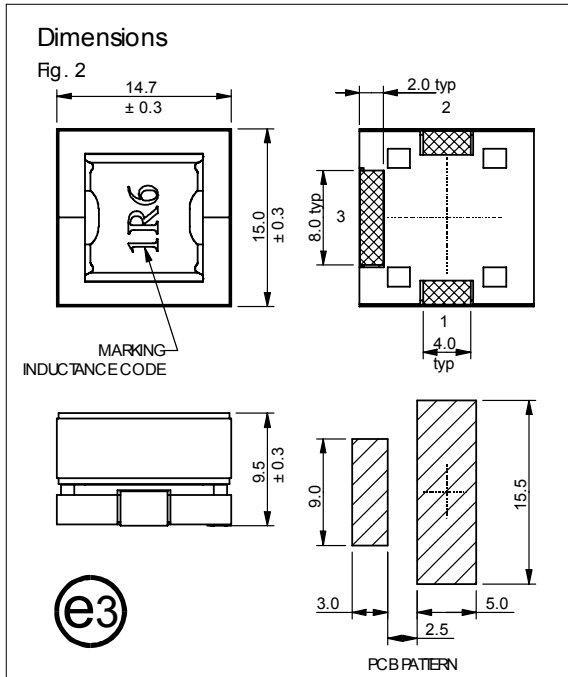
Part Number	Inductance (μH) ⁽¹⁾	DCR (m Ω) Max	Rated Current I_{DC} (A) ⁽²⁾
P7608-R56Y	0.56 \pm 30%	1.0	30
P7608-1R0M	1.0 \pm 20%	1.2	22
P7608-1R6M	1.6 \pm 20%	1.5	18
P7608-2R2M	2.2 \pm 20%	1.9	15

Notes

1. Inductance measured at 100kHz, 1V.
2. Rated current, I_{DC} , is the current at which the temperature rise is 40°C (max) or the DC current at which the zero-current inductance drops by 25% (max) whichever is less.
3. Operating temperature -25°C to +85°C.
4. For non-standard inductance values, please contact Profec.



CONSTRUCTION

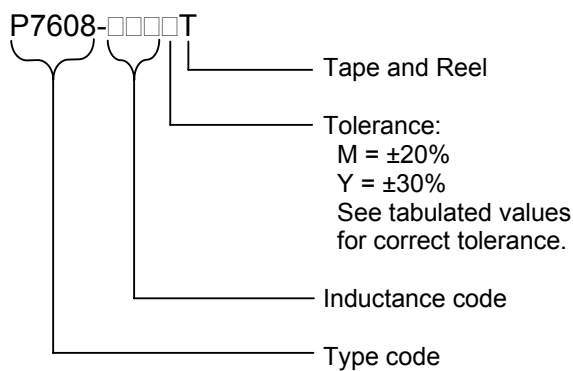


Dimensions shown are in millimetres

Terminal plating JESD97 category = e3.

Recommended reflow solder profile:
2 minutes @ 150-200°C,
10 seconds @ 260°C;
time above 217°C 60 seconds maximum.

ORDERING CODE



ABSOLUTE MAXIMUM RATINGS

Storage temperature	-40°C to +105°C
Operating temperature	-25°C to +85°C
Soldering temperature profile peak	260°C 10s

Handle in accordance with IPC/JEDEC J-STD-033 procedure for components classified as IPC/JEDEC J-STD-020 Moisture Sensitivity Level 2.