

ULTRA HIGH POWER INDUCTOR

P7608 Family

Features

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

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. Components are supplied with Pb-free terminations in tape and reel packaging, and are suitable for Pb-free and conventional placement and reflow.





SPECIFICATIONS

Electrical

Part Number	Inductance (µH) ⁽¹⁾	DCR (mΩ) Max	Rated Current I _{DC} (A) ⁽²⁾
P7608-R56Y	0.56±30%	1.0	30
P7608-1R0M	1.0±20%	1.2	22
P7608-1R6M	1.6±20%	1.5	18
P7608-2R2M	2.2±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 is pure tin (Sn). Recommended reflow solder profile: 2 minutes (min) @ 100-150°C, 10 seconds (max) @ 230°C; time above 200°C 30 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





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