

HIGH POWER INDUCTOR

P7600 Family

Features

- * High Current
- * Low Loss, Low DCR
- * Closed magnetic circuit
- * Low Profile
- * Lead-free (Pb-free)
- * RoHS compliant
- * Alloy powder core
- * Helical rectangular wire

Applications

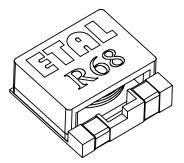
- * DC-DC Converters
- * Voltage Regulator Modules
- * Distributed Power
- * Servers
- Workstations
- * Telecom equipment
- Notebook and handheld equipment

DESCRIPTION

The P7600 family comprises high-energy-density surface mount inductors. The family employs helical windings of rectangular wire, giving excellent DC resistance, thermal efficiency and high frequency performance. A distributed gap powder core is used, yielding stable inductances at very high currents with a closed magnetic current.

Components are supplied with Pb-free terminations in tape and reel packaging, and are compliant with RoHS Directive 2002/95/EC, and suitable for lead-free and conventional placement and reflow.







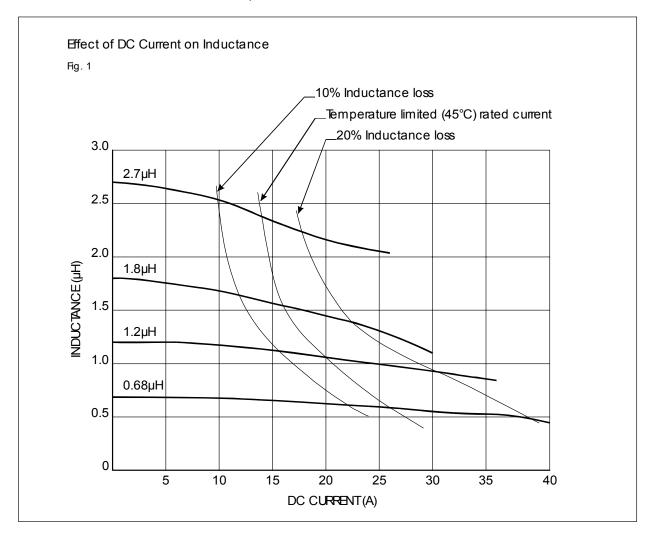
SPECIFICATIONS

Electrical

Part Number	Inductance (µH) (1)	DCR (mΩ) Max	Rated Current I _{RMS} (A) ⁽²⁾	I _{sat} (A) ⁽³⁾
P7600-R68M	0.68±20%	1.8	26	22
P7600-1R2M	1.2±20%	2.8	20	16
P7600-1R8M	1.8±20%	3.9	16	12
P7600-2R7M	2.7±20%	4.8	14	10

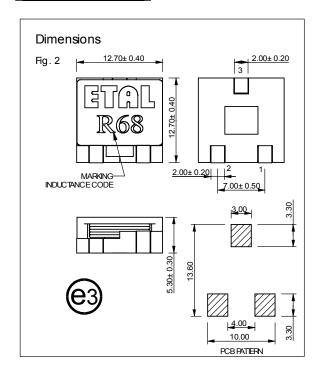
Notes

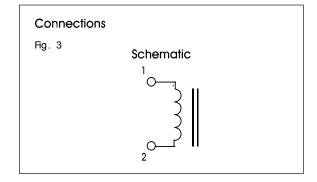
- 1. Inductance measured at 100kHz, 100mV.
- 2. Rated current is the current at which the temperature rise is 45°C.
- 3. Saturation current, I_{sat} , is the DC current at which the zero-current inductance falls by 10%. For this family, inductance falls by around 25% for a current of 2x I_{sat} .
- 4. Operating temperature -25°C to +105°C.
- 5. For non-standard inductance values, please contact Profec.





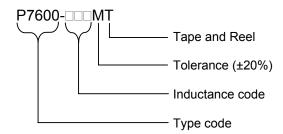
CONSTRUCTION





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 +125°C

Operating temperature -25°C to

+105°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.





ETAL Group Oy, Kuormatie 14, FIN-03101, Nummela Telephone: +358 (0)20 7500 330 Fax: +358 (0)20 7500 333 Website: www.etalgroup.com Email: etalgroup@egruppen.com