

HIGH POWER INDUCTOR**P7600 Family****Features**

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

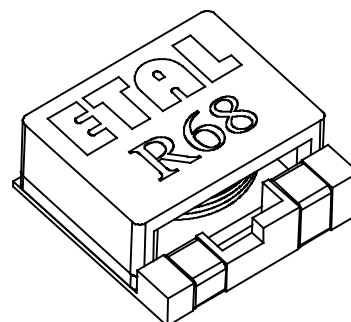
Applications

- * 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 suitable for Pb-free and conventional placement and reflow.



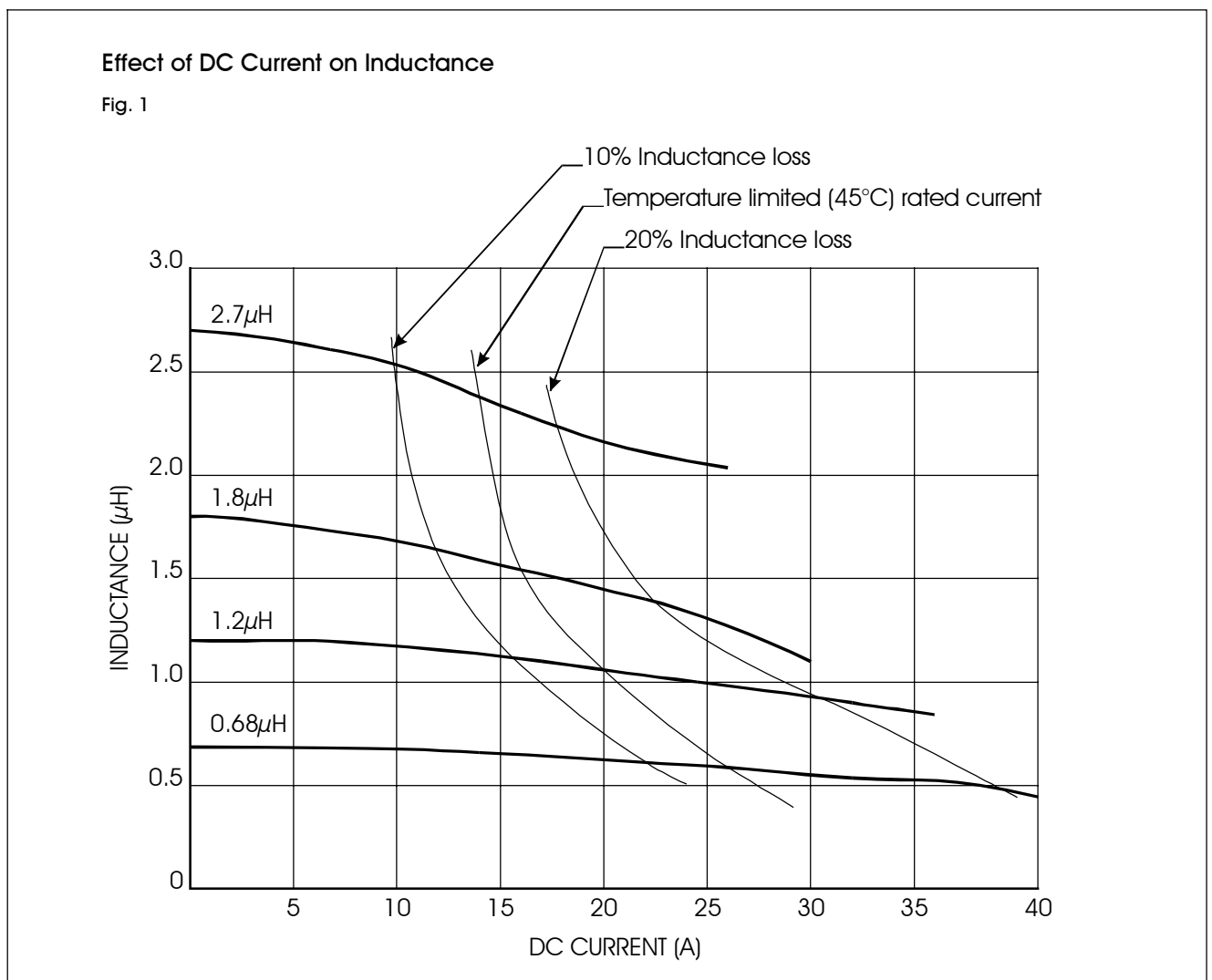
SPECIFICATIONS

Electrical

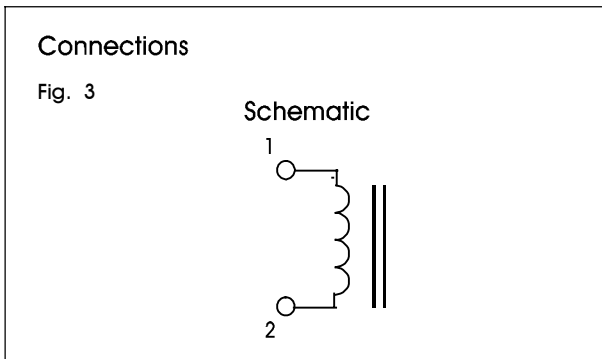
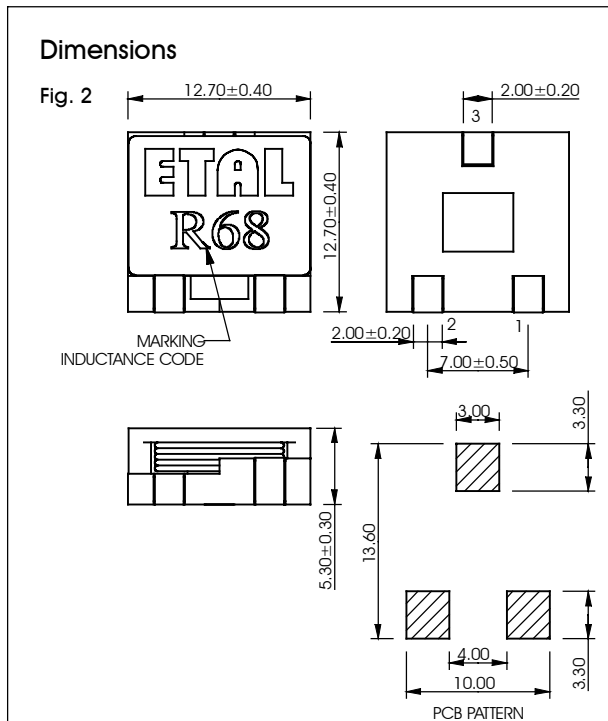
Part Number	Inductance (μH) ⁽¹⁾	DCR (m Ω) Max	Rated Current I_{RMS} (A) ⁽²⁾	I_{sat} (A) ⁽³⁾
P7600-R68M	0.68 \pm 20%	1.8	26	22
P7600-1R2M	1.2 \pm 20%	2.8	20	16
P7600-1R8M	1.8 \pm 20%	3.9	16	12
P7600-2R7M	2.7 \pm 20%	4.8	14	10

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.

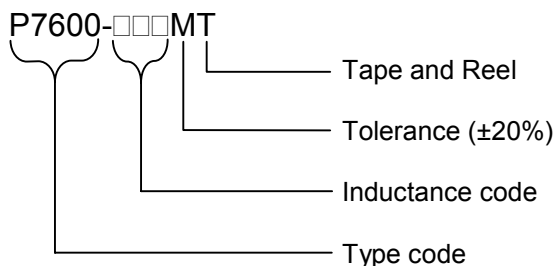


CONSTRUCTION



Dimensions shown are in millimetres
Terminal plating 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 +125°C
Operating temperature	-25°C to +105°C
Soldering temperature profile peak	260°C 10s

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