

HIGH POWER INDUCTOR**P7611 Family****Features**

- * Lead-free (Pb-free)
- * RoHS compliant
- * High Current (>50A)
- * Low DCR (to 0.6mΩ)
- * Foil windings
- * Closed magnetic circuit

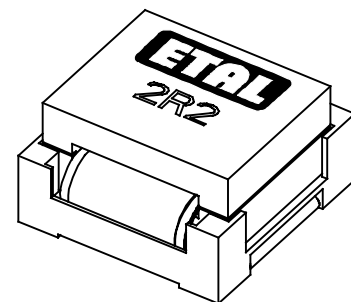
Applications

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

DESCRIPTION

The P7611 family comprises high-energy-density surface mount inductors. The family employs copper foil windings, giving excellent DC resistance, thermal efficiency and high frequency performance to 1MHz. The core is a closed magnetic circuit to afford magnetic shielding.

The P7611 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

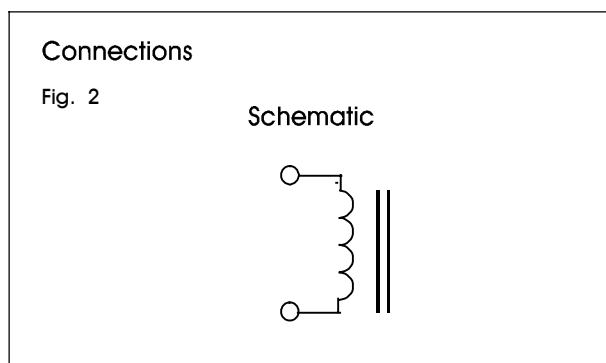
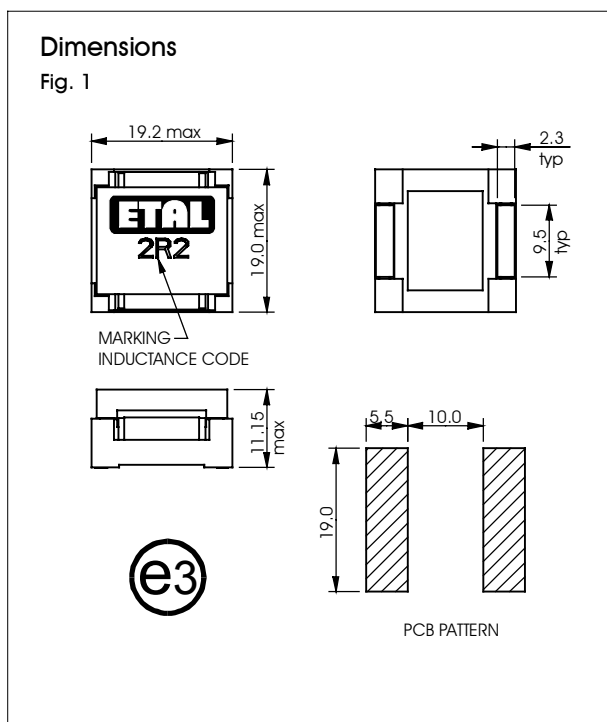
Electrical

Part Number	Nominal Inductance (μH)	Inductance (μH) ⁽¹⁾	DCR (mΩ) Max	Rated Current I _{RMS} (A) ⁽²⁾	I _{sat} ⁽²⁾
P7611-R47MT	0.47	0.52±20%	0.6	53	64
P7611-R68MT	0.68	0.63±20%	0.6	53	50
P7611-1R0MT	1.0	1.15±20%	1.3	33	42
P7611-2R2MT	2.2	2.0±20%	2.3	24	32
P7611-4R7MT	4.7	4.55±20%	4.6	17	21
P7611-5R6MT	5.6	5.6±20%	4.6	17	17

Notes

1. Inductance measured at 300kHz, 250mV.
2. Rated current, I_{RMS}, is the current at which the temperature rise is 40°C typical.
3. Saturation Current, I_{sat}, is the DC current at which the zero-current inductance drops by 30% (typ).
4. Operating temperature -40°C to +85°C.
5. For non-standard inductance values, please contact Profec.

CONSTRUCTION

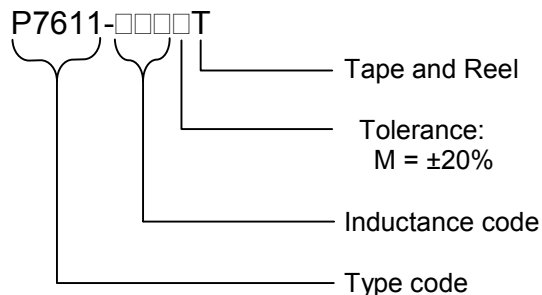


Dimensions shown are in millimetres

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 +105°C
Operating temperature	-40°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.

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