

**NEW!**

Shielded Power Inductors – PFL1610



- Low cost, low profile 0603 size power inductor
- Only 1 mm high, and requires less than 2 mm² of board space
- Provides the current handling of much larger inductors; up to 2350 mA.

Designer's Kit C433 contains 20 each of all values

Terminations RoHS compliant matte tin over nickel over silver-platinum-glass frit. Other terminations available at additional cost.

Weight 5.4 – 5.7 mg

Ambient temperature –40°C to +85°C with I_{rms} current, +85°C to +125°C with derated current

Storage temperature Component: –40°C to +125°C.
Packaging: –40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 2000 per 7" reel Paper tape: 8 mm wide, 1.68 mm thick, 2 mm pocket spacing

PCB washing Only pure water or alcohol recommended

Part number ¹	Inductance ² ±20% (µH)	DCR (mOhms) ³		SRF typ ⁴ (MHz)	Isat (mA) ⁵			Irms (mA) ⁶	
		typ	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
PFL1610-331ME_	0.33	85	98	644	1140	1860	2350	1100	1500
PFL1610-471ME_	0.47	183	205	540	1000	1700	1820	770	1000
PFL1610-681ME_	0.68	203	223	423	800	1500	1630	720	970
PFL1610-102ME_	1.0	331	365	351	650	1000	1260	570	750

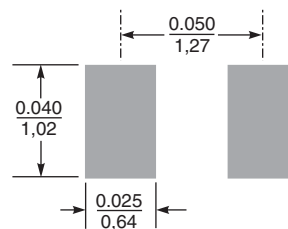
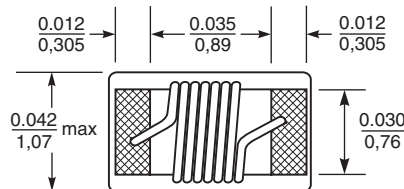
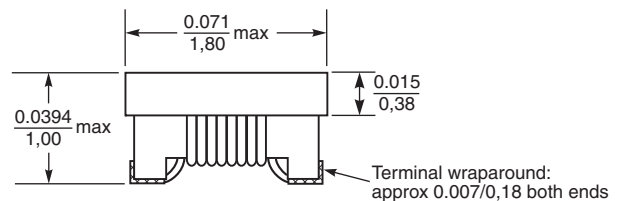
1. When ordering, please specify **packaging** codes:

PFL1610-102ME W

Packaging: **W** = 7" machine-ready reel. EIA-481 punched paper tape (2000 parts per full reel).

U = Less than full reel. In tape, but not machine ready.
To have a leader and trailer added (\$25 charge), use code letter **W** instead.

- Inductance tested at 7.9 MHz, 0.1 V_{rms} using a Coilcraft SMD-F test fixture with an Agilent/HP 4286 impedance analyzer and Coilcraft-provided correlation pieces.
 - DCR measured using a micro-ohmmeter.
 - SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.
 - DC current at which the inductance drops the specified amount from its value without current.
 - Current that causes the specified temperature rise from 25°C ambient.
 - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



**Recommended
Land Pattern**

Dimensions are in $\frac{\text{inches}}{\text{mm}}$

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Specifications subject to change without notice.
Please check our website for latest information.

Document 753-1 Revised 12/14/09

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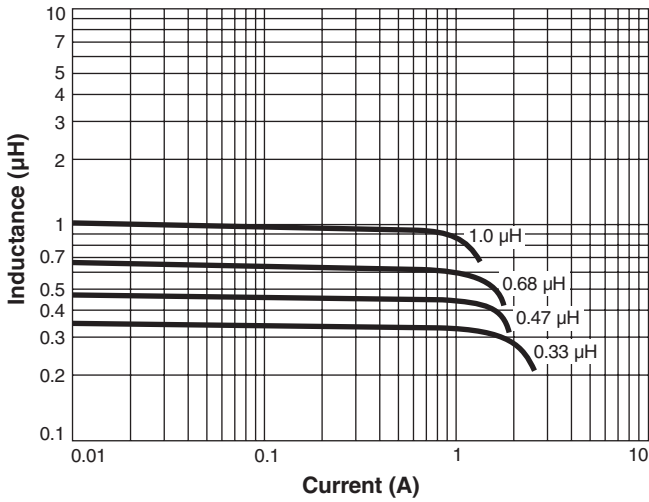
E-mail info@coilcraft.com Web <http://www.coilcraft.com>



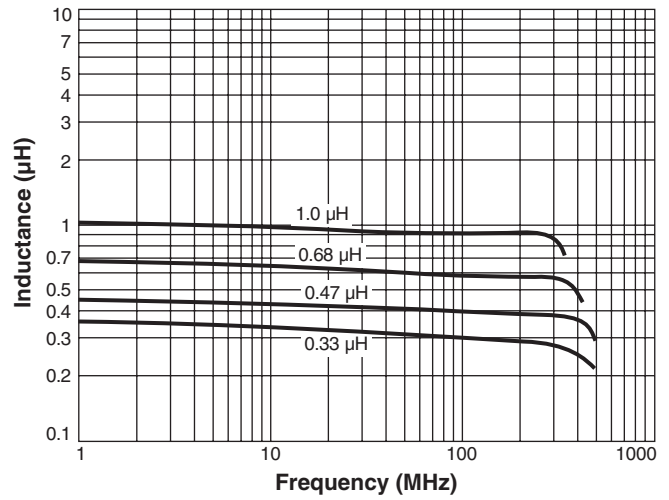
NEW!

PFL1610 Series

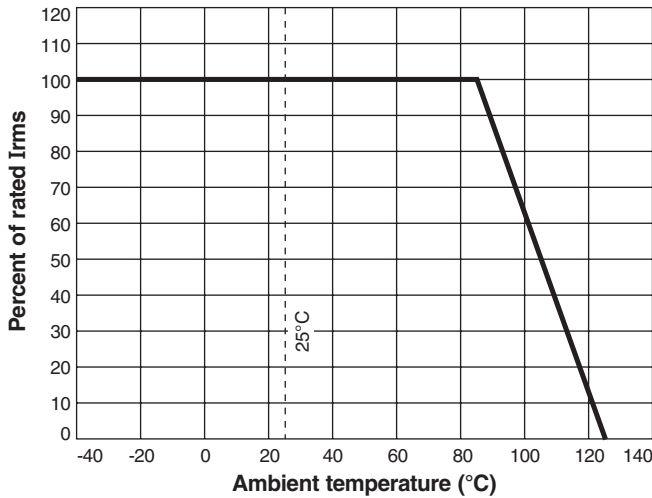
L vs Current



L vs Frequency



Irms Derating



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COILCRAFT ACCURATE
PRECISION REPEATABLE
MEASUREMENTS
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