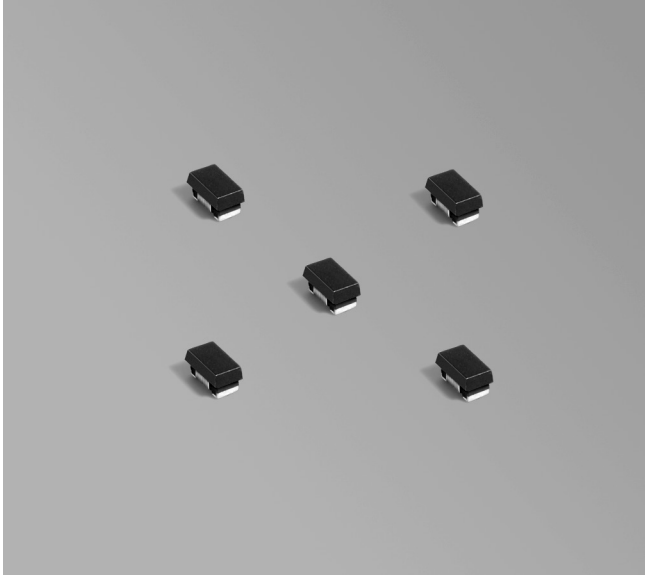


Shielded Power Inductors – PFL1610



- Low cost, low profile, 0603 size power inductor
- Current handling of much larger inductors; up to 2350 mA.

Environmental RoHS compliant, halogen free

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

Core material Composite

Core and winding loss See www.coilcraft.com/coreloss

Weight 5.4 – 5.7 mg

Ambient temperature –40°C to +85°C with (40°C rise) Irms current.

Maximum part temperature +125°C (ambient + temp rise). [Derating](#).

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

Tape and reel 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)

Packaging 2000 per 7" reel Paper tape: 8 mm wide, 1.0 mm thick, 4 mm pocket spacing

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

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
PFL1610-331MEW	0.33	85	98	644	1140	1860	2350	1100	1500
PFL1610-471MEW	0.47	183	205	540	1000	1700	1820	770	1000
PFL1610-561MEW	0.56	143	160	475	800	1400	1600	700	900
PFL1610-681MEW	0.68	203	223	423	800	1500	1630	720	970
PFL1610-102MEW	1.0	331	365	351	650	1000	1260	570	750
PFL1610-222MEW	2.2	1120	1230	105	330	555	660	280	380
PFL1610-472MEW	4.7	1560	1720	85	290	480	560	230	310

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

PFL1610-472MEW

Packaging: **W** = 7" machine-ready reel. EIA-481 punched paper tape (2000 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

U = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from U to W.

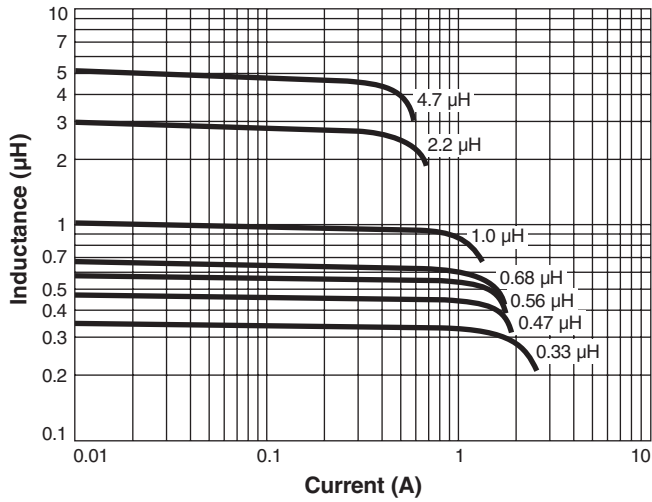
2. Inductance tested at 7.9 MHz, 0.1 Vrms using a Coilcraft SMD-F test fixture with an Agilent/HP 4286 impedance analyzer and Coilcraft-provided correlation pieces.
3. DCR measured using a micro-ohmmeter.
4. SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.
5. DC current at 25°C that causes the specified inductance drop from its value without current. [Click for temperature derating information](#).
6. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings. [Click for temperature derating information](#).
7. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

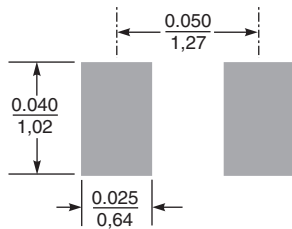
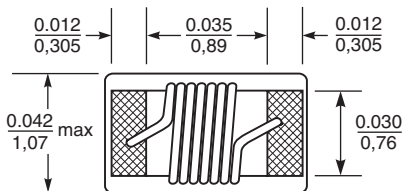
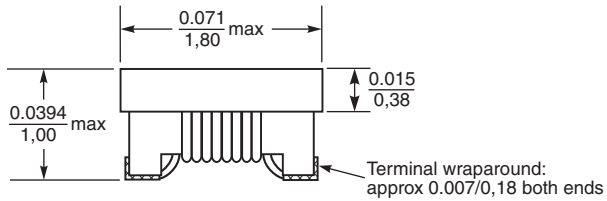
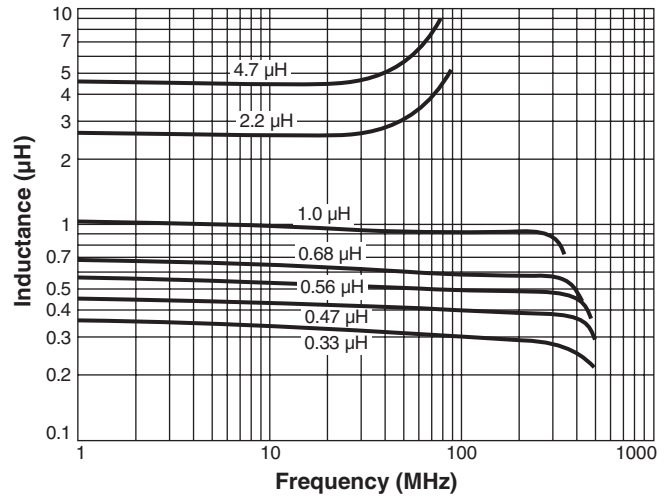


PFL1610 Series

L vs Current



L vs Frequency



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

Recommended Land Pattern



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This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.