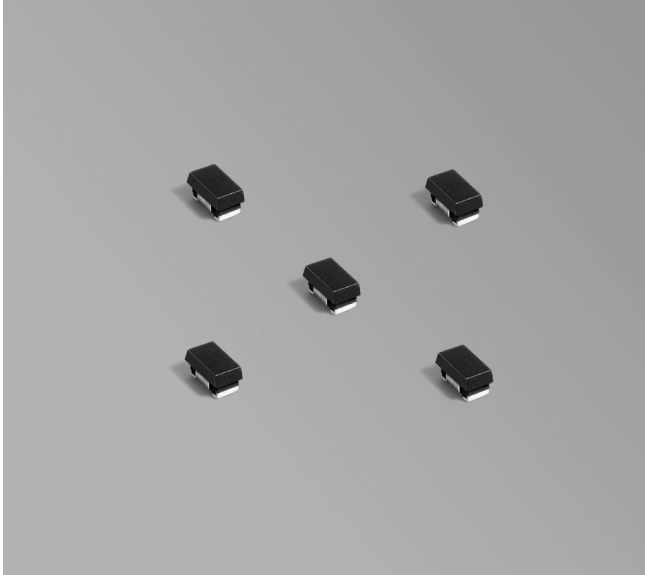


Shielded Power Inductors – PFL1610



- 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)

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

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.

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.



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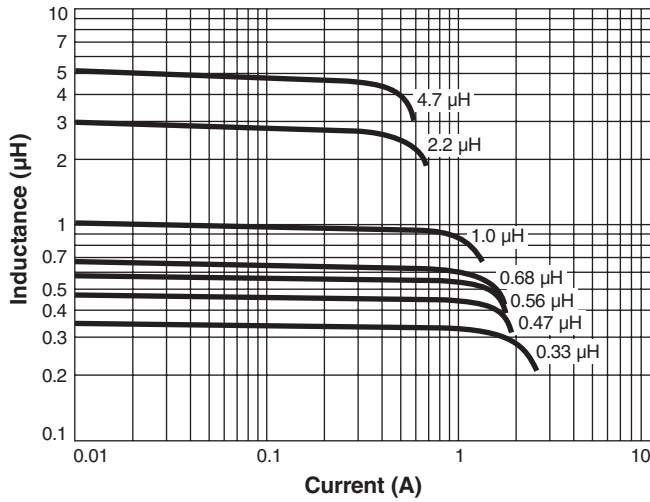
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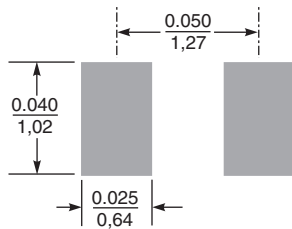
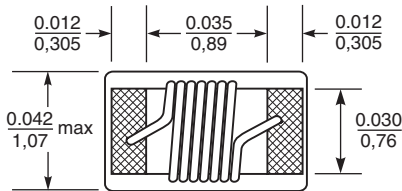
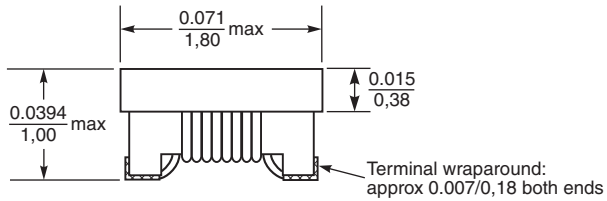
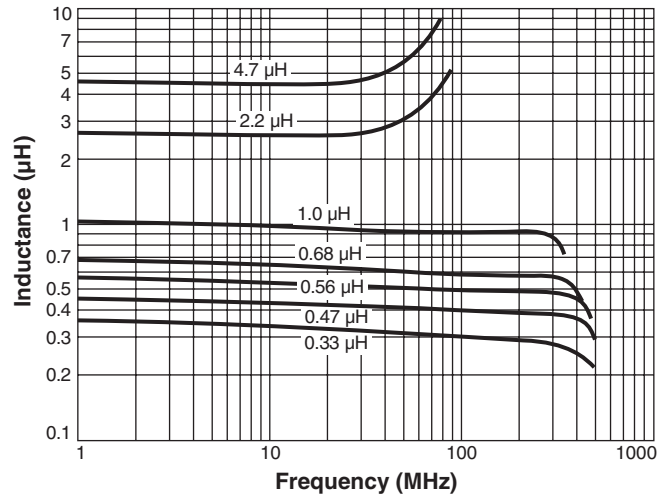


PFL1610 Series

L vs Current



L vs Frequency



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

Recommended Land Pattern



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