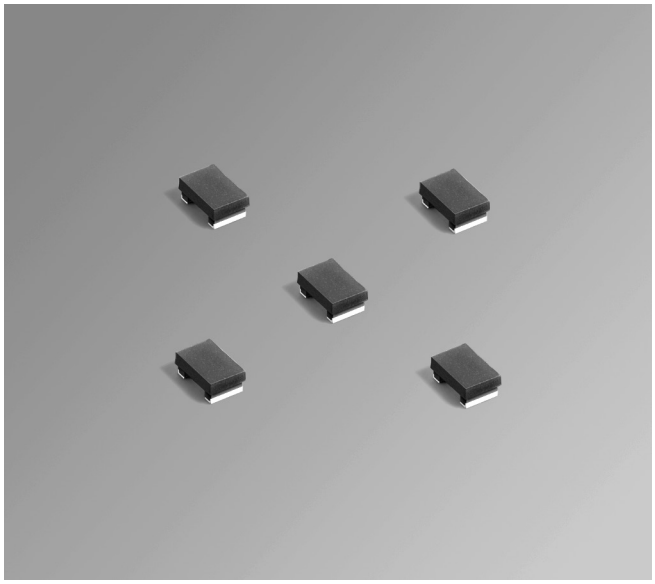
Shielded Power Inductors – PFL2010



- Only 1 mm high; requires a mere 3.2 mm² of board space
- Provides the current handling of much larger inductors; up to 1800 mA

Core material Composite

Environmental RoHS compliant, halogen free

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

Weight 9.5 – 9.8 mg

Ambient temperature –40°C to +85°C with Irms current, +85°C to +125°C with derated current

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 2000/7″ reel; 7500/13″ reel. Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.07 mm pocket depth

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

Part number[1]	Inductance[2] ±20% (µH)	DCR (mOhms)[3] typ	DCR (mOhms)[3] max	SRF typ[4] (MHz)	Isat (mA)[5] 10% drop	Isat (mA)[5] 20% drop	Isat (mA)[5] 30% drop	Irms (mA)[6] 20°C rise	Irms (mA)[6] 40°C rise
PFL2010-471ME_	0.47	60	69	630	1200	1600	1800	1500	1900
PFL2010-681ME_	0.68	87	95	560	950	1300	1500	1400	1600
PFL2010-102ME_	1.0	189	208	347	850	1100	1200	640	860
PFL2010-222ME_	2.2	423	465	129	510	680	790	480	660
PFL2010-472ME_	4.7	618	680	66	330	490	570	420	560

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

   PFL2010-472MEC

   Packaging: **C** = 7″ machine-ready reel. EIA-481 embossed plastic tape (2000 parts per full reel).
   B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter C instead.
   D = 13″ machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (7500 parts per full reel).
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 that causes the specified inductance drop from its value without current.
6. Current that causes the specified temperature rise from 25°C ambient.
7. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

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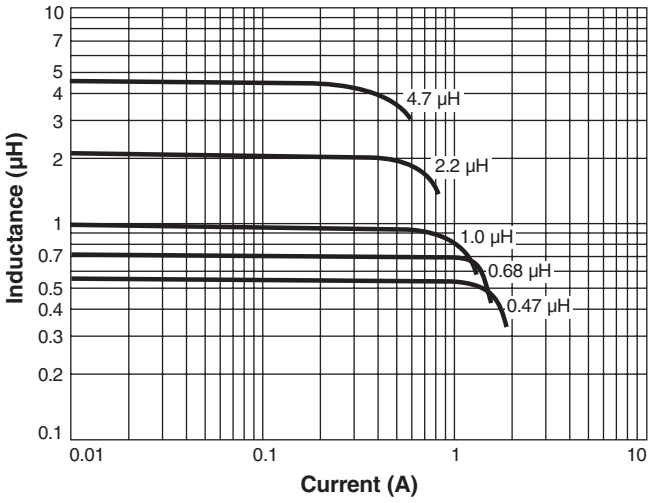
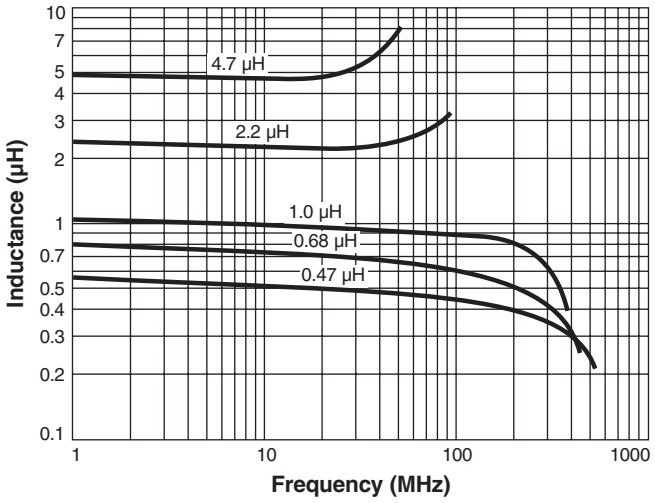
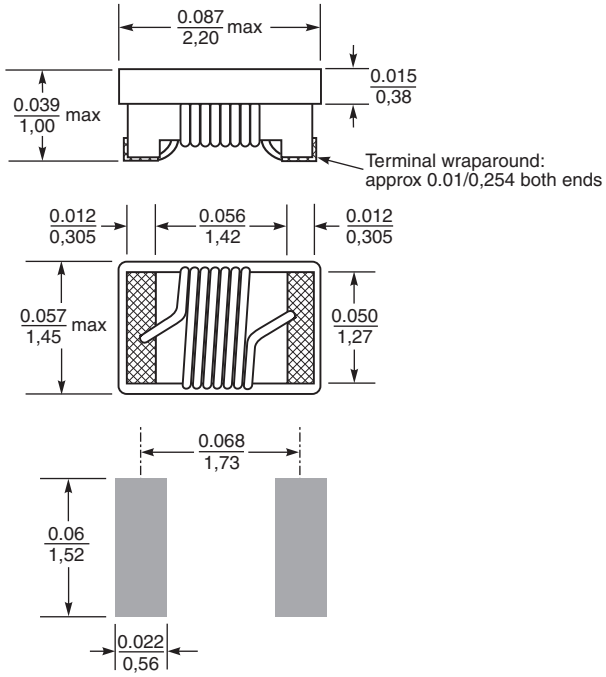
PFL2010 Series

Typical L vs Current



Typical L vs Frequency

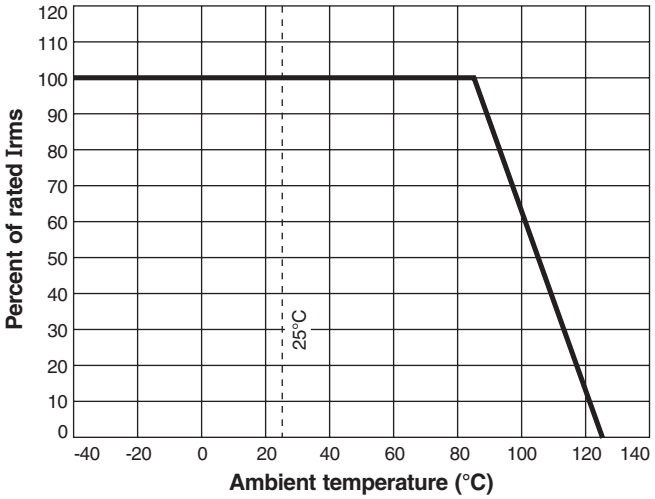




Recommended Land Pattern

Dimensions are in inches / mm

Irms Derating



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