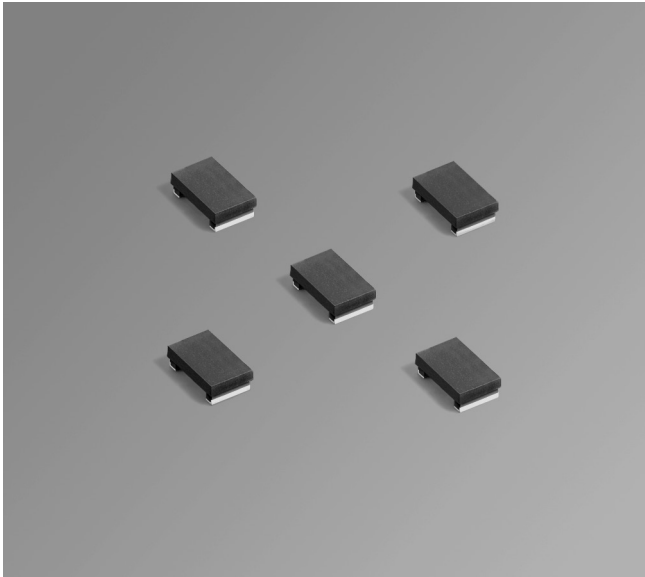


# Shielded Power Inductors – PFL2512



- Low cost, low profile 1008 size power inductor
- Provides current handling of much larger inductors; up to 3.5 A

**Designer's Kit C444** contains 5 of each PFL2512 and PFL2510 value

**Core material** Composite

**Core and winding loss** See [www.coilcraft.com/coreloss](http://www.coilcraft.com/coreloss)

**Environmental** RoHS compliant, halogen free

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

**Weight** 21.2 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** 2000/7" reel; 7500/13" reel. Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.32 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

Part number <sup>1</sup>	Inductance <sup>2</sup> ±20% (µH)	DCR (mOhms) <sup>3</sup>		SRF typ <sup>4</sup> (MHz)	Isat (mA) <sup>5</sup>			Irms (mA) <sup>6</sup>	
		typ	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
PFL2512-681ME_	0.68	64	80	550	2100	3100	3500	1700	2200
PFL2512-102ME_	1.0	80	92	375	1600	2600	2900	1300	1700
PFL2512-152ME_	1.5	160	185	300	1400	1900	2000	900	1200
PFL2512-222ME_	2.2	240	270	225	870	1400	1700	760	1000
PFL2512-332ME_	3.3	480	540	200	850	1200	1400	600	780
PFL2512-472ME_	4.7	770	850	185	830	1100	1200	430	570

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

PFL2512-472ME**C**

**Termination:** **E** = RoHS compliant matte tin over nickel over silver.

Special order, added cost:

**Q** = RoHS tin-silver-copper (95.5/4/0.5) or **P** = non-RoHS tin-lead (63/37).

**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-A 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.](#)

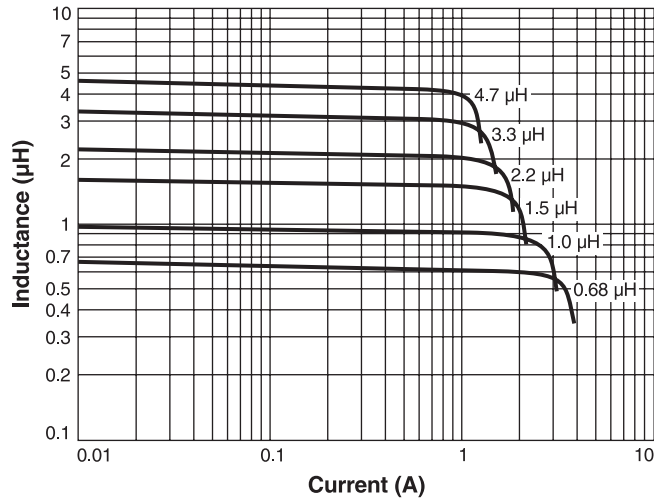
7. Electrical specifications at 25°C.

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

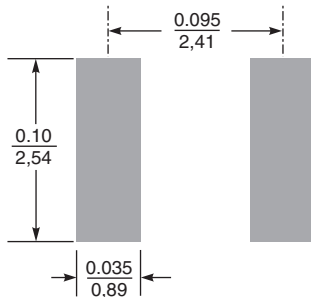
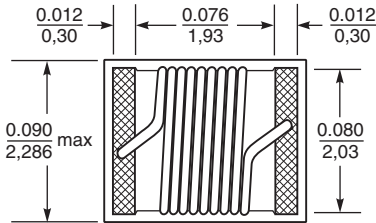
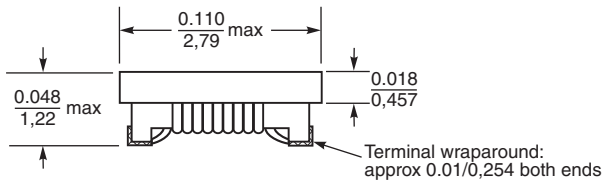
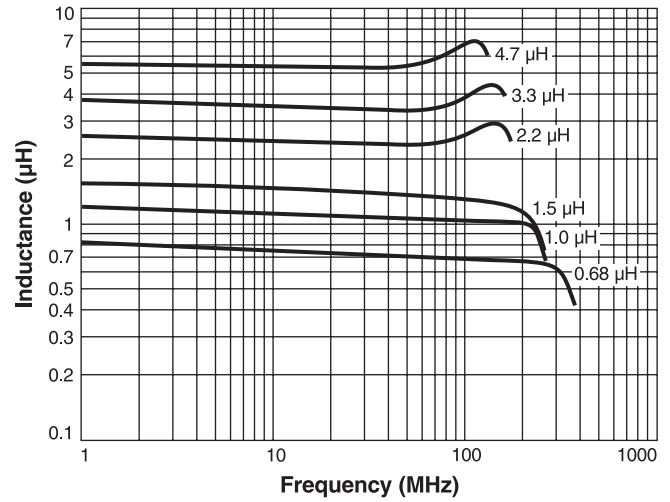


# PFL2512 Series

## L vs Current



## L vs Frequency



**Recommended Land Pattern**

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



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