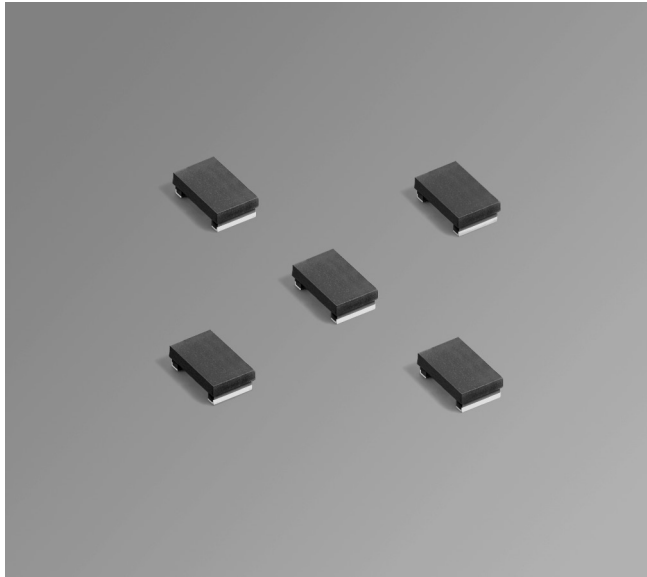


# Shielded Power Inductors – PFL2512



- 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**  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  with ( $40^{\circ}\text{C}$  rise) Irms current.

**Maximum part temperature**  $+125^{\circ}\text{C}$  (ambient + temp rise). **Derating.**

**Storage temperature** Component:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .

Tape and reel packaging:  $-40^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$

**Resistance to soldering heat** Max three 40 second reflows at  $+260^{\circ}\text{C}$ , parts cooled to room temperature between cycles

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at  $<30^{\circ}\text{C}$  / 85% relative humidity)

**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> $\pm 20\%$ ( $\mu\text{H}$ )	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). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

**D** = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (7500 parts per full reel).

**B** = 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 B to C.

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  $25^{\circ}\text{C}$  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  $25^{\circ}\text{C}$  ambient. This information is for reference only and does not represent absolute maximum ratings. [Click for temperature derating information.](#)

7. Electrical specifications at  $25^{\circ}\text{C}$ .

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



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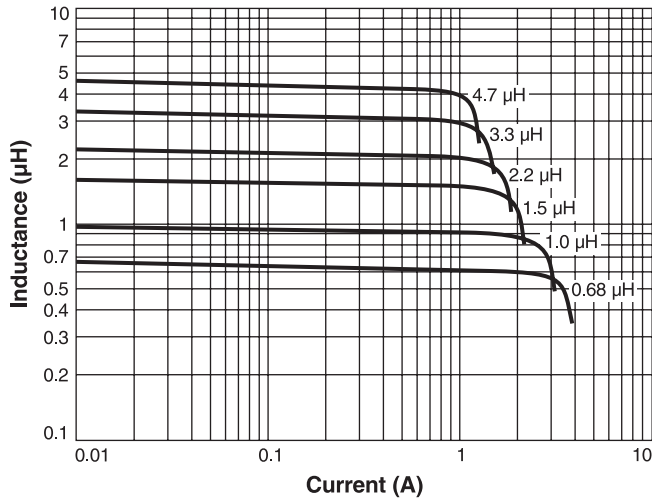
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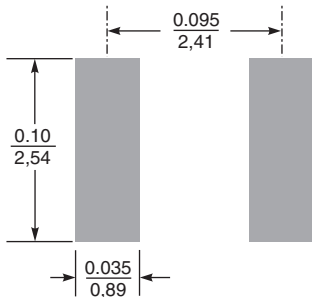
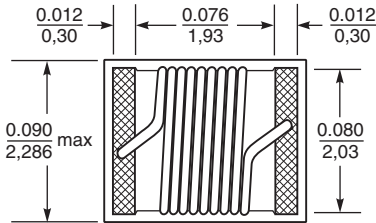
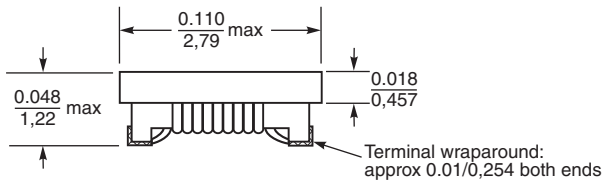
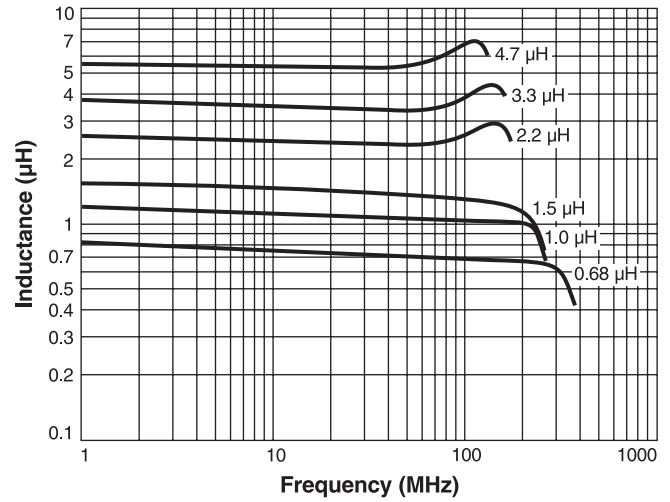


# PFL2512 Series

## L vs Current



## L vs Frequency



**Recommended Land Pattern**

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



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