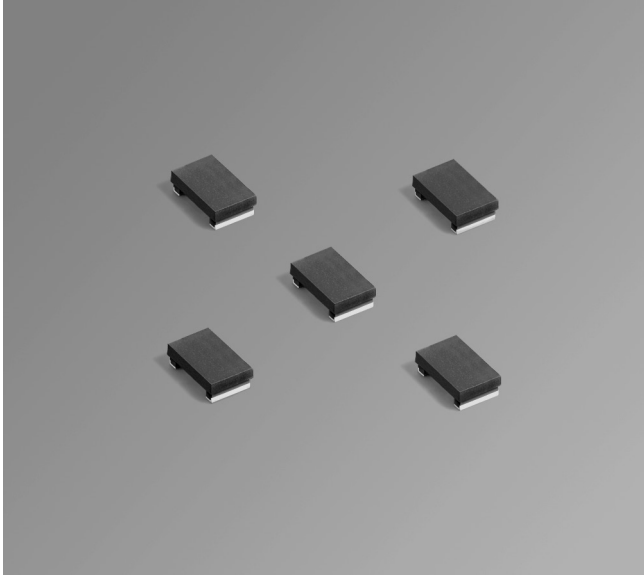


Shielded Power Inductors – PFL2510



- Low cost, low profile 1008 size power inductor
- Provides current handling of much larger inductors; up to 4.1 A

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

Environmental RoHS compliant, halogen free

Core material Composite

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

Weight 17.7 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 2000/7" 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 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
PFL2510-151ME_	0.15	27	36	970	3400	3900	4100	2200	2900
PFL2510-221ME_	0.22	37	47	815	2900	3300	3400	1800	2500
PFL2510-681ME_	0.68	60	70	500	1300	1900	2300	1400	1800
PFL2510-102ME_	1.0	72	83	375	1300	1600	1800	1400	1900
PFL2510-222ME_	2.2	195	240	310	850	1100	1300	830	1100
PFL2510-332ME_	3.3	490	590	245	700	890	990	530	710
PFL2510-472ME_	4.7	760	900	175	660	830	890	430	580

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

PFL2510-472MEC

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 an inductance drop of 30% (typ) 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.



www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com

UK +44-1236-730595 sales@coilcraft-europe.com

Taiwan +886-2-2264 3646 sales@coilcraft.com.tw

China +86-21-6218 8074 sales@coilcraft.com.cn

Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 829-1 Revised 12/08/16

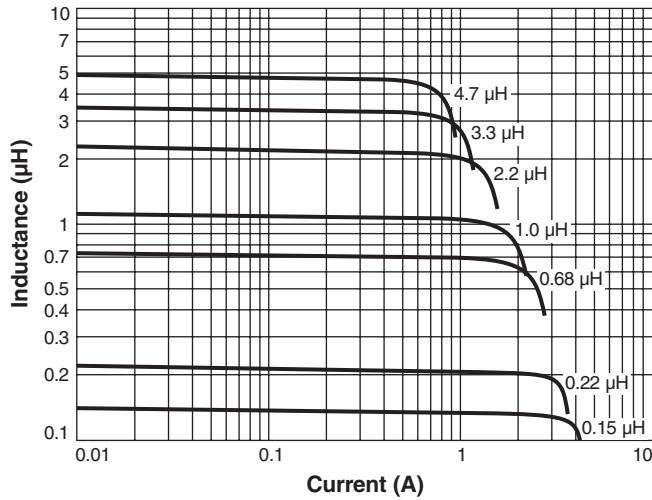
© Coilcraft Inc. 2017

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.

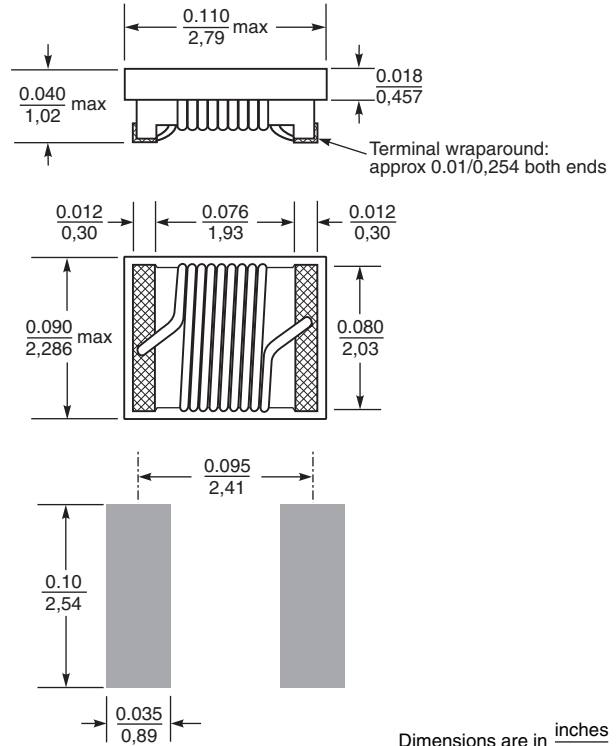
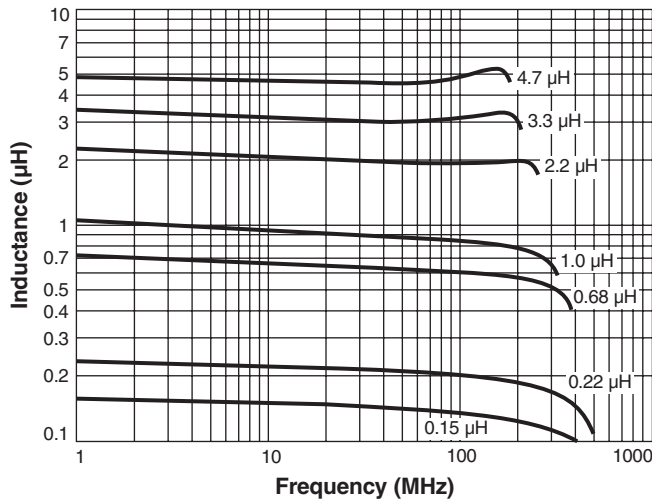


PFL2510 Series

Typical L vs Current



Typical L vs Frequency



Recommended Land Pattern

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



www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 829-2 Revised 12/08/16

© Coilcraft Inc. 2017

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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Coilcraft:

<u>PFL2510-221MEC</u>	<u>PFL2510-681MEC</u>	<u>PFL2510-222MEC</u>	<u>PFL2510-102MEC</u>	<u>PFL2510-151MEC</u>	<u>PFL2510-332MEC</u>
<u>PFL2510-221MEB</u>	<u>PFL2510-332MEB</u>	<u>PFL2510-681MEB</u>	<u>PFL2510-472MEC</u>	<u>PFL2510-102MEB</u>	<u>PFL2510-472MEB</u>
<u>PFL2510-151MEB</u>	<u>PFL2510-222MEB</u>				