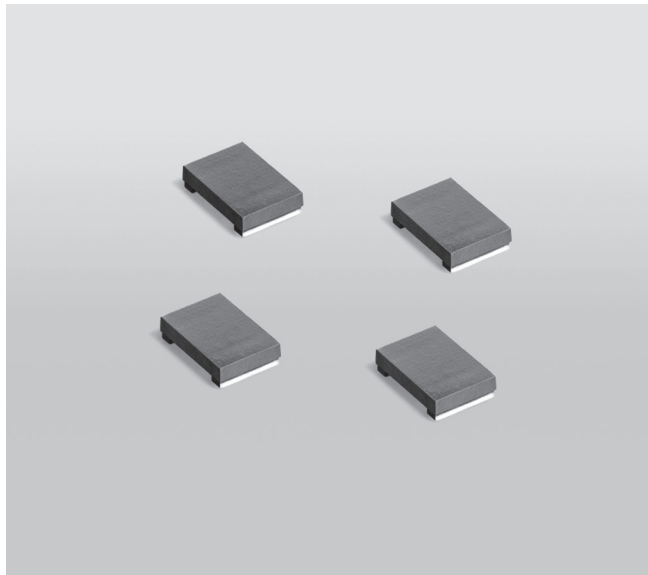



NEW!

Shielded Power Inductors – PFL4514



- Low cost, low profile miniature power inductor
- Only 1.4 mm high; requires a mere 16 mm² of board space
- Provides the current handling of much larger inductors; up to 4.2 A.

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 73.5 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 1000/7" reel; 5000/13" reel. Plastic tape: 12 mm wide, 0.21 mm thick, 8 mm pocket spacing, 1.65 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number ¹	Inductance ² ±20% (µH)	DCR (mOhms) ³		SRF typ ⁴ (MHz)	Isat (A) ⁵			Irms (A) ⁶	
		typ	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
PFL4514-102ME_	1.0	80	96	300	2.8	3.8	4.2	1.5	2.0
PFL4514-222ME_	2.2	115	135	240	1.8	2.6	3.0	1.2	1.5
PFL4514-472ME_	4.7	220	260	180	1.4	1.9	2.1	0.89	1.2
PFL4514-682ME_	6.8	400	480	170	1.1	1.5	1.7	0.86	1.2
PFL4514-103ME_	10	680	800	140	0.97	1.2	1.4	0.49	0.67
PFL4514-153ME_	15	1140	1350	110	0.77	0.99	1.1	0.44	0.58
PFL4514-223ME_	22	2330	2750	75	0.59	0.74	0.79	0.31	0.41

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

PFL4514-223MEC

Packaging: **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (1000 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 (5000 parts per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc.

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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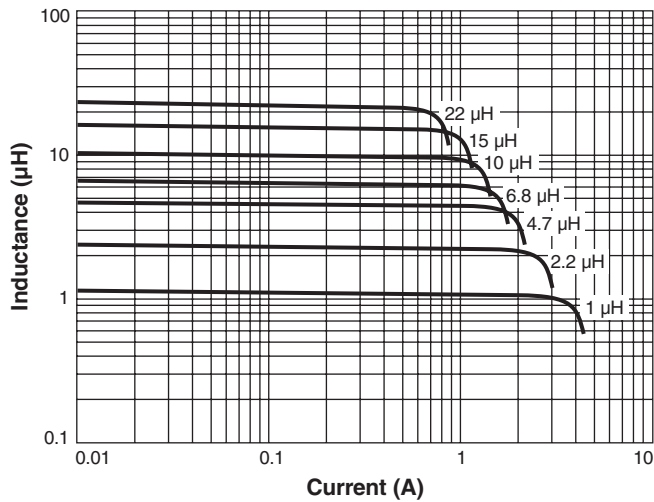
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This product may not be used in medical of high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check out web site for latest information.

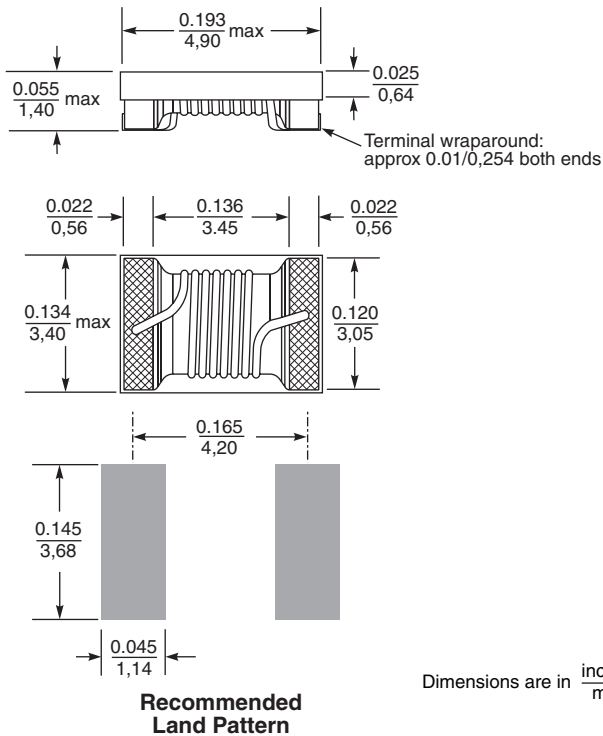
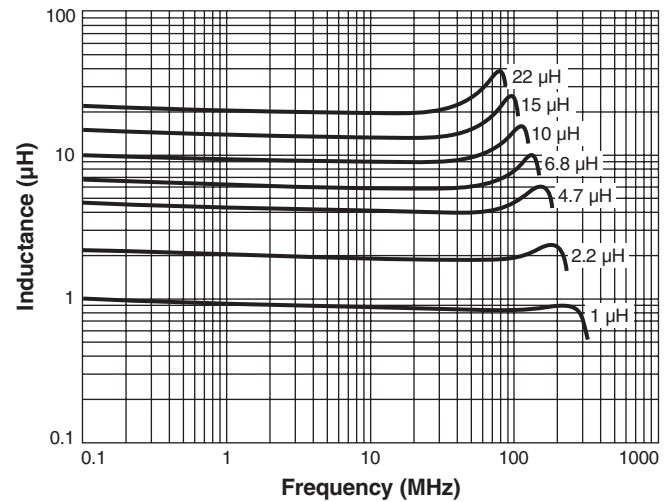

NEW!

PFL4514 Series

L vs Current



L vs Frequency



Irms Derating

