Shielded Power Inductors – PFL3215

- Low cost, low profile 1206 size power inductor
- Provides the current handling of much larger inductors; up to 2700 mA

**Core material** Composite

**Core and winding loss** See 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**  31 – 39 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.

**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 / 26,318,789 hours, calculated per Telcordia SR-332

**Packaging**  2000/7″ reel; 7500/13″ reel. Plastic tape: 12 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.65 mm pocket depth

**PCB washing**  Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance *</th>
<th>DCR (mOhms)</th>
<th>SRF typ</th>
<th>Isat (mA)</th>
<th>Irms (mA)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>±20% (µH)</td>
<td>typ max</td>
<td>typ (MHz)</td>
<td>10% drop</td>
<td>20% drop</td>
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<tr>
<td>PFL3215-681ME_</td>
<td>0.68</td>
<td>28 33</td>
<td>450</td>
<td>2100</td>
<td>2500</td>
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<tr>
<td>PFL3215-102ME_</td>
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<td>30 38</td>
<td>375</td>
<td>1800</td>
<td>2100</td>
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<td>PFL3215-222ME_</td>
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<td>950</td>
<td>1200</td>
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<td>322 372</td>
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<td>640</td>
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<td>1700 1920</td>
<td>13.5</td>
<td>290</td>
<td>340</td>
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</tbody>
</table>

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

   **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.
PFL3215 Shielded Power Inductors

L vs Current

L vs Frequency

Terminal wraparound: approx 0.015/0.381 both ends

Recommended Land Pattern

Dimensions are in inches

RoHS Compliant
Halogen Free

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