## Shielded Power Inductors – XFL4015

- Very low profile, only 1.5 mm high
- Extremely low DCR, excellent current handling, soft saturation
- AEC-Q200 Grade 1 qualified (−40°C to +125°C ambient)

**Designer’s Kit C455** contains 5 of each XFL4012 and XFL4015 value.

**Core material** Composite

**Environmental** RoHS compliant, halogen free

**Terminations** RoHS compliant tin-silver over copper. Other terminations available at additional cost.

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance² ±20% (µH)</th>
<th>DCR (mOhms)³</th>
<th>SRF typ.</th>
<th>Isat (A)⁵</th>
<th>Irms (A)⁶</th>
</tr>
</thead>
<tbody>
<tr>
<td>XFL4015-181ME_</td>
<td>0.18</td>
<td>4.20</td>
<td>4.70</td>
<td>150</td>
<td>6.2</td>
</tr>
<tr>
<td>XFL4015-331ME_</td>
<td>0.33</td>
<td>6.80</td>
<td>7.50</td>
<td>112</td>
<td>5.5</td>
</tr>
<tr>
<td>XFL4015-471ME_</td>
<td>0.47</td>
<td>7.60</td>
<td>8.36</td>
<td>89</td>
<td>3.5</td>
</tr>
<tr>
<td>XFL4015-701ME_</td>
<td>0.70</td>
<td>9.50</td>
<td>10.45</td>
<td>70</td>
<td>3.3</td>
</tr>
<tr>
<td>XFL4015-122ME_</td>
<td>1.2</td>
<td>18.8</td>
<td>20.7</td>
<td>61</td>
<td>2.6</td>
</tr>
</tbody>
</table>

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

   **Termination:** E = RoHS compliant tin-silver over copper.
   Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).

   **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 (4000 parts per full reel).

2. Inductance tested at 1 MHz, 0.1 Vrms, 0 Adc.
3. DCR measured on a micro-ohmmeter.
4. SRF measured using Agilent/HP 4395A or equivalent.
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.

### Irms Testing

Irms testing was performed on 0.75 inch wide × 0.25 inch thick copper traces in still air.

Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.
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Typical L vs Current

Typical L vs Frequency

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Recommended Land Pattern

Dash number

Indicates start lead and orientation of terminations

Dash thickness (typ)

Number (in / mm)

Terminal

Dimensions are in inches

Packaging 1000/7” reel; 4000/13” reel

Plastic tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 1.78 mm pocket depth

For optional tin-lead and tin-silver-copper terminations, dimensions are for the mounted part. Dimensions before mounting can be an additional 0.005 inch / 0.13 mm.