Shielded Power Inductor – XFL3012

- High current, magnetically shielded power inductors
- 3 mm × 3 mm footprint; 1.3 mm maximum height
- AEC-Q200 Grade 3 (−40°C to +85°C)

Designer’s Kit C440 contains 5 of each XFL3012 and XFL3010 value
Core material: Composite
Environmental: RoHS compliant, halogen free
Terminations: RoHS compliant tin-silver-copper (96.5/3/0.5) over tin over nickel over silver-platinum. Other terminations available at additional cost.
Weight: 53 mg
Operating voltage: 0 – 40 V
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: −55°C to +125°C. Tape and reel packaging: −55°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)
Packaging: 2000/7″ reel; 7500/13″ reel. Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.55 mm pocket depth

Typical L vs Frequency

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Shileded Power Inductor – XFL3012

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance</th>
<th>DCR (Ohms)</th>
<th>SRF typ</th>
<th>Isat (A)</th>
<th>Irms (A)</th>
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<tr>
<td></td>
<td>±20% (µH)</td>
<td>nom</td>
<td>max</td>
<td>10% drop</td>
<td>20% drop</td>
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<td>XFL3012-331ME_</td>
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<td>6.1</td>
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</table>

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

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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.

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