**SMT Power Inductors – ME3215**

- Low profile, small footprint power inductor
- 2.5 × 3.2 mm footprint; 1.55 mm tall

**Designer's Kit C408** contains 3 each of all values

**Core material**  Ferrite

**Core and winding loss** See www.coilcraft.com/coreloss

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

**Weight**  46 – 48 mg

**Ambient temperature**  –40°C to +85°C with Irms current

**Maximum part temperature**  +125°C (ambient + temp rise)

**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; 7000/13″ reel

Plastic tape: 12 mm wide, 0.25 mm thick, 4 mm pocket spacing, 2.25 mm pocket depth

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

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<table>
<thead>
<tr>
<th>Part number1</th>
<th>Inductance2 (µH)</th>
<th>DCR max3 (Ohms)</th>
<th>SRF typ4 (MHz)</th>
<th>Isat (A)5</th>
<th>Irms (A)6</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>10% drop</td>
<td>20% drop</td>
<td>30% drop</td>
<td>20°C rise</td>
</tr>
<tr>
<td>ME3215-102ML_</td>
<td>1.0 ±20%</td>
<td>0.058</td>
<td>100</td>
<td>2.32</td>
<td>2.62</td>
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<tr>
<td>ME3215-222ML_</td>
<td>2.2 ±20%</td>
<td>0.107</td>
<td>64</td>
<td>1.62</td>
<td>1.84</td>
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<td>ME3215-332ML_</td>
<td>3.3 ±20%</td>
<td>0.170</td>
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<td>ME3215-472ML_</td>
<td>4.7 ±20%</td>
<td>0.245</td>
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<td>ME3215-103KL_</td>
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<tr>
<td>ME3215-153KL_</td>
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<tr>
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<td>19</td>
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<td>0.28</td>
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<tr>
<td>ME3215-104KL_</td>
<td>100 ±10%</td>
<td>4.67</td>
<td>10</td>
<td>0.23</td>
<td>0.26</td>
</tr>
</tbody>
</table>

1. Please specify termination and packaging codes:

ME3215-104KL

**Termination:**  L = RoHS tin-silver over tin over nickel over silver.

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 (2000 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 (7000 parts per full reel).

2. Inductance measured at 100 kHz, 0.1 Vrms. 0 Adc using Coilcraft SMD-A fixture in Agilent/HP 4284A impedance analyzer.

3. DCR measured on a micro-ohmmeter and Coilcraft CCF858 test fixture.

4. SRF measured using Agilent/HP 8753D network analyzer and Coilcraft SMD-D test fixture.

5. DC current at which the inductance drops the specified amount 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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SMT Power Inductors – ME3215 Series

Typical L vs Current

Typical L vs Frequency

Dimensions are in inches/mm

Recommended Land Pattern

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.