SMT Power Inductors – ME3215

- Low profile, small footprint power inductor
- 2.5 x 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-copper 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
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)

Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc using Coilcraft SMD-A fixture in Agilent/HP 4284A impedance analyzer.
DCR measured on a micro-ohmmeter and Coilcraft CCF858 test fixture.
SRF measured using Agilent/HP 8753D network analyzer and Coilcraft SMD-D test fixture.
DC current at which the inductance drops the specified amount from its value without current.
Current that causes the specified temperature rise from 25°C ambient.
Electrical specifications at 25°C.

1. Please specify termination and packaging codes:

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance (µH)</th>
<th>DCR (Ohms)</th>
<th>SRF (MHz)</th>
<th>Isat (A)</th>
<th>Irms (A)</th>
</tr>
</thead>
<tbody>
<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>
</tr>
<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>
</tr>
<tr>
<td>ME3215-332ML</td>
<td>3.3 ±20%</td>
<td>0.170</td>
<td>55</td>
<td>1.22</td>
<td>1.40</td>
</tr>
<tr>
<td>ME3215-472ML</td>
<td>4.7 ±20%</td>
<td>0.245</td>
<td>43</td>
<td>1.06</td>
<td>1.20</td>
</tr>
<tr>
<td>ME3215-103KL</td>
<td>10 ±10%</td>
<td>0.505</td>
<td>26</td>
<td>0.71</td>
<td>0.81</td>
</tr>
<tr>
<td>ME3215-153KL</td>
<td>15 ±10%</td>
<td>0.773</td>
<td>26</td>
<td>0.58</td>
<td>0.65</td>
</tr>
<tr>
<td>ME3215-223KL</td>
<td>22 ±10%</td>
<td>1.00</td>
<td>19</td>
<td>0.50</td>
<td>0.57</td>
</tr>
<tr>
<td>ME3215-333KL</td>
<td>33 ±10%</td>
<td>1.48</td>
<td>17</td>
<td>0.42</td>
<td>0.47</td>
</tr>
<tr>
<td>ME3215-473KL</td>
<td>47 ±10%</td>
<td>2.33</td>
<td>15</td>
<td>0.33</td>
<td>0.38</td>
</tr>
<tr>
<td>ME3215-683KL</td>
<td>68 ±10%</td>
<td>3.40</td>
<td>12</td>
<td>0.28</td>
<td>0.31</td>
</tr>
<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>

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.
SMT Power Inductors – ME3215 Series

Typical L vs Current

![Typical L vs Current Graph]

Typical L vs Frequency

![Typical L vs Frequency Graph]

Recommended Land Pattern

![Recommended Land Pattern Diagram]

Dimensions are in inches or mm.