**Low Profile Mini Spring™ Inductors**

*Only 2 mm tall*
*High Q over a wide range of frequencies*
*Low DCR and excellent current handling capability*

**Designer’s Kit C394** contains 10 samples each 5% part  
**Designer’s Kit C394-2** contains 10 samples each 2% part  

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

**Weight**  
48 – 130 g  

**Ambient temperature**  
–40°C to +125°C with Imax current  

**Maximum part temperature**  
+140°C (ambient + temp rise).  

**Storage temperature**  
Component: –40°C to +140°C.  
Tape and reel packaging: –40°C to +80°C  

**Resistance to soldering heat**  
Max three 40 second refloows at +260°C, parts cooled to room temperature between cycles  

**Temperature Coefficient of Inductance (TCL)**  
+5 to +70 ppm/°C  

**Moisture Sensitivity Level (MSL)**  
1 (unlimited floor life at <30°C / 85% relative humidity)  

**Failures in Time (FIT) / Mean Time Between Failures (MTBF)**  
One per billion hours / one billion hours, calculated per Telcordia SR-332  

**Packaging**  
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 number</th>
<th>Turns</th>
<th>Inductance (nH)</th>
<th>Percent tol</th>
<th>Q² min</th>
<th>SRF min (GHz)</th>
<th>DCR max (mOhm)</th>
<th>Imax ²</th>
<th>Wt (mg)</th>
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<tbody>
<tr>
<td>1508-5N5_L_</td>
<td>3</td>
<td>5.5</td>
<td>5,2</td>
<td>115</td>
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<td>5,2</td>
<td>120</td>
<td>4.0</td>
<td>3.4</td>
<td>4.0</td>
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<td>16.0</td>
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<td>4.0</td>
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<td>110</td>
<td>2.3</td>
<td>7.9</td>
<td>4.0</td>
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</tbody>
</table>

1. Specify **tolerance**, **termination** and **packaging** codes:  

2. L and Q measured at 250 MHz, 0.1 Vrms, 0 A using an Agilent/HP 4291A impedance analyzer with an Agilent/HP 16193A test fixture.  
3. Tolerances in bold are stocked for immediate shipment.  
4. **SRF** measured using an Agilent/HP 8753 network analyzer and a Coilcraft SMD-D test fixture.  
5. **DCR** measured using a micro-ohmmeter.  
6. Current that causes a 15°C temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.  
7. Electrical specifications at 25°C.  

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.
Low Profile Mini Spring™ Inductors

Typical L vs Frequency

Typical Q vs Frequency

Recommended Land Patterns

Strip Length

Dimensions are in inches/mm