## Broadband Conical Inductors

- Designed specifically for broadband and high frequency applications.
- Operates as a series of narrow-band inductors throughout an operating frequency range of 10 MHz up to 40 GHz.
- Ideal for use in ultra-wideband bias Tees, where the conical inductor provides the path for the DC bias injection or extraction while isolating the power source from the active device.
- Supplied with “flying leads” that allow adjustment of the mounting angle.
- For a surface mount version with a self positioning mounting bracket, consider the BCR series.

### Terminations
- Tin-silver-copper (96.5/3/0.5) over copper

### Ambient Temperature
- –40°C to +85°C with Irms current, +85°C to 125°C with derated current

### Storage Temperature
- Component: –40°C to +125°C
- Tape and reel packaging: –40°C to +80°C

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

### Packaging
- 25 per tray

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

### Dimensions

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance1 ±5% (µH)</th>
<th>DCR max (Ohms)</th>
<th>Irms2 (mA)</th>
<th>Weight mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCL-221JL</td>
<td>0.22</td>
<td>0.10</td>
<td>1200</td>
<td>10.2</td>
</tr>
<tr>
<td>BCL-531JL</td>
<td>0.53</td>
<td>0.15</td>
<td>1060</td>
<td>19.8</td>
</tr>
<tr>
<td>BCL-122JL</td>
<td>1.20</td>
<td>1.05</td>
<td>270</td>
<td>5.1</td>
</tr>
<tr>
<td>BCL-162JL</td>
<td>1.65</td>
<td>0.60</td>
<td>490</td>
<td>17.1</td>
</tr>
<tr>
<td>BCL-232JL</td>
<td>2.35</td>
<td>1.61</td>
<td>270</td>
<td>8.5</td>
</tr>
<tr>
<td>BCL-272JL</td>
<td>2.75</td>
<td>0.40</td>
<td>675</td>
<td>67.2</td>
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<tr>
<td>BCL-632JL</td>
<td>6.35</td>
<td>0.92</td>
<td>480</td>
<td>81.0</td>
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<tr>
<td>BCL-652JL</td>
<td>6.50</td>
<td>0.70</td>
<td>650</td>
<td>151</td>
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<tr>
<td>BCL-802JL</td>
<td>8.00</td>
<td>3.39</td>
<td>230</td>
<td>25.3</td>
</tr>
</tbody>
</table>

1. Inductance measured at 10 MHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4286A LCR meter and a Coilcraft CCF 1111 fixture.
2. Current that causes a 40°C rise from 25°C ambient.
3. Electrical specifications at 25°C.

### Irms Derating

![Irms Derating Graph](image)

### Optimum Mounting Angle

- Dimensions
  - A: 0.008 ±0.002
  - B: 0.057 ±0.005
  - C: 0.138
  - D: 0.166 ±0.010
  - E: 0.100 ±0.010

- Optimum mounting angle is application specific.

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This product may not be used in medical or high-risk applications without prior Coilcraft approval.

Specification subject to change without notice.

Please check website for latest information.
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Insertion Loss

Return Loss

![Graphs showing S11 and S21 parameters for different frequencies.](image-url)
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Insertion Loss

Return Loss

Response curves measured in a bias tee configuration with an Agilent/HP 8722ES network analyzer.