### Maxi Spring™ Air Core Inductors

- Air core inductors feature higher Q, L and current ratings
- Rigid package provides a flat surface for pick and place
- Leads are locked in position for precise terminal spacing

**Weight** 0.42 – 0.59 g

**Terminations** RoHS compliant tin-silver (96.5/3.5) over copper. Other terminations available at additional cost.

**Ambient temperature** –40°C to +125°C with I<sub>rms</sub> current, +125°C to +140°C with derated current

**Storage temperature** Component: –40°C to +140°C. 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

**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** 800/13” reel Plastic tape: 24 mm wide, 0.3 mm thick, 12 mm pocket spacing, 6.1 mm pocket depth

**PCB washing** Only pure water or alcohol recommended

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<table>
<thead>
<tr>
<th>Part number</th>
<th>Turns</th>
<th>Inductance (nH)</th>
<th>Percent tolerance</th>
<th>Q&lt;sup&gt;2&lt;/sup&gt; typ</th>
<th>Q&lt;sup&gt;2&lt;/sup&gt; min</th>
<th>Test freq. (MHz)</th>
<th>SRF min (GHz)</th>
<th>DCR max (mOhm)</th>
<th>I&lt;sub&gt;rms&lt;/sub&gt; (A)</th>
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1. When ordering, specify tolerance, termination and packaging codes:

- **Termination:** L = RoHS compliant tin-silver (96.5/3.5) over copper.
  - Special order: T = RoHS tin-silver-copper (95.5/4/0.5)
  - S = non-RoHS tin-lead (63/37).
- **Tolerance:** G = 2%  J = 5%
- **Packaging:** D = 13” machine-ready reel. EIA-481 embossed plastic tape (800 parts 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 D instead.

2. Inductance and Q tested at 50 MHz on an Agilent/HP 4291A with a 16193 fixture and correlation.

3. Tolerances in bold are stocked for immediate shipment.

4. SRF tested on the Agilent/HP 8753D and a Coilcraft CCF1248 test fixture.

5. DCR tested on the Cambridge Technology Model 510 Micro Ohmmeter.

6. Current that causes a 15°C temperature rise from 25°C ambient.

7. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.
Maxi Spring™ Air Core Inductors

Typical L vs Frequency

Typical Q vs Frequency

Typical Irms Derating

Recommended Land Pattern

Dimensions are in inches (mm)

Maxi Spring™ Air Core Inductors

Typical L vs Frequency

Typical Q vs Frequency

Typical Irms Derating

Recommended Land Pattern

Dimensions are in inches (mm)