Shielded Power Inductors – MSS6132

- 6.1 x 6.1 mm footprint; 3.2 mm high shielded inductors
- Low DCR and excellent current handling

**Designer's Kit C364** contains 3 of each value

**Core material** Ferrite

**Core and winding loss** See [www.coilcraft.com/coreloss](http://www.coilcraft.com/coreloss)

**Terminations** RoHS compliant matte tin over nickel over phos bronze (current production) or gold over nickel over phos bronze (prior production). Other terminations available at additional cost.

**Weight** 0.33 – 0.38 g

**Ambient temperature** –40°C to +85°C with (40°C rise) Irms current.

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

**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** 500/7” reel, 1500/13” reel; Plastic tape: 16 mm wide, 0.3 mm thick, 12 mm pocket spacing, 3.1 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](http://www.coilcraft.com)

**Packaging: C**

- Tape and reel packaging: –40°C to +85°C with (40°C rise)
- Storage temperature +125°C (ambient + temp rise).
- 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: C

**Termination** L = RoHS compliant matte tin over nickel over phos bronze (current production) or gold over nickel over phos bronze (prior production)

**Special order:**

- T = RoHS tin-silver-copper (95.5/4/0.5) over gold over nickel over phos bronze or S = non-RoHS tin-lead (63/37) over gold over nickel over phos bronze.

**Packaging:**

- C = 7” machine-ready reel EIA-481 embossed plastic tape (500 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 (1500 per reel for full reel).

**Part number**

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance ≤20% (µH)</th>
<th>DCR max (Ohms)</th>
<th>SRF typ (MHz)</th>
<th>Isat (A)</th>
<th>Irms (A)</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td>10% drop</td>
<td>20% drop</td>
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<tr>
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1. Please specify **termination** and **packaging** codes:

   - MSS6132-823MLC

   **Termination:** L = RoHS compliant matte tin over nickel over phos bronze (current production) or gold over nickel over phos bronze (prior production)

   **Special order:**

   - T = RoHS tin-silver-copper (95.5/4/0.5) over gold over nickel over phos bronze or S = non-RoHS tin-lead (63/37) over gold over nickel over phos bronze.

   **Packaging:**

   - C = 7” machine-ready reel EIA-481 embossed plastic tape (500 per full reel).
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   - D = 13” machine-ready reel EIA-481 embossed plastic tape. Factory order only, not stocked (1500 per reel for full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.

3. SRF measured using Agilent/HP 4191A or equivalent.

4. DC current at which the inductance drops the specified amount from its value without current.

5. DC current at 25°C that causes the specified inductance drop from its value without current.

6. Click for temperature derating information.

7. Electrical specifications at 25°C.

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**SPICE models**

ON OUR WEB SITE

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SMT Power Inductors – MSS6132

Typical L vs Current

Typical L vs Frequency

*Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, add 0.016 in / 0.4 mm.