NEW!

Shielded Power Inductors – MSS5131H

- 5.1 x 5.1 mm footprint; 3.1 mm high shielded inductors
- Low DCR and excellent current handling
- AEC-Q200 Grade 3 qualified (–40°C to +85°C ambient)

Core material Ferrite
Core and winding loss See www.coilcraft.com/coreloss
Environmental RoHS compliant, halogen free
Terminations RoHS compliant matte tin over nickel over phos bronze.
Weight 0.20 – 0.24 g
Ambient temperature –40°C to +85°C with (40°C rise) Ims 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 refloows 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 600/7” reel, 2500/13” reel; Plastic tape: 12 mm wide, 0.35 mm thick, 8 mm pocket spacing, 3.25 mm pocket depth
PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

Typical L vs Current

Typical L vs Frequency
Shielded Power Inductors – MSS5131H

1. Please specify termination and packaging codes:

MSS5131H-47ME   E = RoHS compliant matte tin over nickel over phos bronze.

Special order: Q = RoHS tin-silver-copper (95.5/0.5) over gold over nickel over phos bronze or P = non-RoHS tin-lead (63/37) over gold over nickel over phos bronze.

Packaging: C = 7” machine-ready reel EIA-481 embossed plastic tape. Factory order only, not stocked (2500 per reel per 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 25°C that causes the specified inductance drop from its value without current. Click for temperature derating information.

5. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings. Click for temperature derating information.


<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance² (±20% (µH))</th>
<th>DCR (Ohms)²</th>
<th>SRF typ³ (MHz)</th>
<th>Isat (A)⁴</th>
<th>Irms (A)⁵</th>
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</thead>
<tbody>
<tr>
<td>MSS5131H-182ME_</td>
<td>1.8</td>
<td>0.018</td>
<td>0.021</td>
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<td>3.00</td>
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<tr>
<td>MSS5131H-332ME_</td>
<td>3.3</td>
<td>0.029</td>
<td>0.033</td>
<td>80</td>
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<td>MSS5131H-472ME_</td>
<td>4.7</td>
<td>0.040</td>
<td>0.046</td>
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<td>0.052</td>
<td>51</td>
<td>1.70</td>
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<td>MSS5131H-622ME_</td>
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<td>MSS5131H-822ME_</td>
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<td>0.113</td>
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<td>0.145</td>
<td>0.167</td>
<td>27</td>
<td>0.95</td>
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</table>

Dimensions:

- **Dash number**: 0.069   4.8
- **Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, add 0.035 in / 0.9 mm.**

**Recommended Land Pattern**

Dimensions are in inches / mm

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