High Temp Power Inductors MSS7341T

- Designed for high ambient temperatures – up to 125°C
- AEC-Q200 Grade 1 (−40°C to +125°C)
- Low DCR and excellent current handling

Core material Ferrite
Core and winding loss See www.coilcraft.com/coreloss
Environment RoHS compliant
Terminations RoHS compliant matte tin over nickel over phos bronze. Other terminations available at additional cost.
Weight 0.61 – 0.67 g
Ambient temperature −40°C to +125°C with (40°C rise) Ims current.
Maximum part temperature +165°C (ambient + temp rise). Derating.
Storage temperature Component: −40°C to +165°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)
Packaging 300/7 reel; 1200/13” reel; Plastic tape: 16 mm wide, 0.35 mm thick, 12 mm pocket spacing, 4.5 mm pocket depth
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

Typical L vs Current

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High Temperature Power Inductors – MSS7341T Series

1. When ordering, specify tolerance, termination and packaging codes:

<table>
<thead>
<tr>
<th>Part number^1</th>
<th>Inductance^2 (µH)</th>
<th>Percent tolerance^3</th>
<th>DCR (Ohms)</th>
<th>SRF typ^4 (MHz)</th>
<th>Isat (A)^5</th>
<th>Irms (A)^6</th>
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<tbody>
<tr>
<td>MSS7341T-332_L</td>
<td>3.3</td>
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<td>0.018</td>
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<td>MSS7341T-154ML</td>
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<td>MSS7341T-224ML</td>
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<td>0.39</td>
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<td>1.85</td>
<td>1.98</td>
<td>2.5</td>
<td>0.20</td>
</tr>
</tbody>
</table>

1. When ordering, specify tolerance, termination and packaging codes:

   Tolerance: M = 20%, N = 30% (Table shows stock tolerances in bold.)
   Termination: L = RoHS compliant matte tin over nickel over phos bronze.
   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 (300 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer ($25 charge).
   D = 13" machine-ready reel. EIA-481 embossed plastic tape (1200 parts per full reel).
   B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to C.

2. Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc using a Coilcraft SMD-A fixture in an Agilent/HP 4263B LCR meter.
3. Tolerances shown in bold are stocked for immediate shipment.
4. SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.
5. DC current at 25°C that causes the specified inductance drop from its value without current. Click for temperature derating information.
6. 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.
7. Electrical specifications at 25°C. Refer to Doc 362 “Soldering Surface Mount Components” before soldering.