SMT Power Inductors - DO3314

- Only 3.3 mm square, 1.4 mm high!
- Handles current up to 1.7 Amps rms

Designer's Kit C358 contains 3 each of all values
Core material Ferrite
Core and winding loss See www.coilcraft.com/coreloss
Terminations RoHS compliant silver-palladium-platinum-glass frit. Other terminations available at additional cost.
Weight 45.9 – 50.2 mg
Ambient temperature -40°C to +85°C with Irms current
Maximum part temperature +125°C (ambient + temp rise)
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 1000/” reel; 3500/” reel Plastic tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 1.37 mm pocket depth
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

<table>
<thead>
<tr>
<th>Part number</th>
<th>L² (µH)</th>
<th>DCR max (Ohms)</th>
<th>SRF typ (MHz)</th>
<th>Isat (A)</th>
<th>Irms (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DO3314-102ML_</td>
<td>1.0</td>
<td>0.11</td>
<td>160</td>
<td>2.10</td>
<td>1.70</td>
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<tr>
<td>DO3314-152ML_</td>
<td>1.5</td>
<td>0.14</td>
<td>140</td>
<td>2.00</td>
<td>1.40</td>
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<tr>
<td>DO3314-222ML_</td>
<td>2.2</td>
<td>0.20</td>
<td>90</td>
<td>1.60</td>
<td>1.30</td>
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<tr>
<td>DO3314-332ML_</td>
<td>3.3</td>
<td>0.26</td>
<td>80</td>
<td>1.40</td>
<td>1.20</td>
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<tr>
<td>DO3314-472ML_</td>
<td>4.7</td>
<td>0.32</td>
<td>60</td>
<td>1.20</td>
<td>1.10</td>
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<tr>
<td>DO3314-682ML_</td>
<td>6.8</td>
<td>0.44</td>
<td>45</td>
<td>0.92</td>
<td>0.80</td>
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<tr>
<td>DO3314-822ML_</td>
<td>8.2</td>
<td>0.47</td>
<td>45</td>
<td>0.90</td>
<td>0.75</td>
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<td>DO3314-103ML_</td>
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<td>0.52</td>
<td>40</td>
<td>0.80</td>
<td>0.75</td>
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<tr>
<td>DO3314-153ML_</td>
<td>15</td>
<td>0.86</td>
<td>30</td>
<td>0.68</td>
<td>0.65</td>
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<td>DO3314-223ML_</td>
<td>22</td>
<td>1.20</td>
<td>20</td>
<td>0.56</td>
<td>0.50</td>
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<tr>
<td>DO3314-333ML_</td>
<td>33</td>
<td>1.62</td>
<td>15</td>
<td>0.51</td>
<td>0.40</td>
</tr>
</tbody>
</table>

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

   Terminations: L = RoHS compliant silver-palladium-platinum-glass frit (Special order: T = RoHS tin-silver-copper (95.5/0.5) or S = non-RoHS tin-lead (63/37)).

   Packaging: C = 7” machine-ready reel. EIA-481 embossed plastic tape (1000 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 C instead.
   D = 13” machine-ready reel. EIA-481 embossed plastic tape (3500 parts per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms.
3. DCR measured on a micro-ohmmeter.
4. SRF measured using Agilent/HP 4191A or equivalent.
5. DC current at which the inductance drops 10% (typ) from its value without current.
6. Current that causes a 40°C temperature rise from 25°C ambient.
7. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.
SMT Power Inductors - DO3314 Series

Typical L vs Frequency

Typical L vs Current

Internal code

Dash number

Recommended Land Pattern

Dimensions are in inches

Dimensions are in mm

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