# 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 1rms current

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

**Storage temperature** Component: -40°C to +125°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)

**Packaging**
- 1000/7” reel; 3500/13” reel Plastic tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 1.37 mm pocket depth
- Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf

## Specifications

<table>
<thead>
<tr>
<th>Part number</th>
<th>L</th>
<th>DCRes</th>
<th>SRF</th>
<th>Isat</th>
<th>IrmS</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>
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<td>0.47</td>
<td>45</td>
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<tr>
<td>DO3314-103ML</td>
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<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>
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<tr>
<td>DO3314-223ML</td>
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<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>
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</tbody>
</table>

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

   - **Termination:** L = RoHS compliant silver-palladium-platinum-glass frit
   - Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).

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

Dimensions are in inches

Dimensions are in mm

* Dimensions are of the case not including the termination, For maximum overall dimensions including the termination, add 0.005 in / 0.13 mm.

Allow an additional 0.01 / 0.254 in length and 0.005 / 0.127 in height for optional tin-lead and tin-silver-copper application.

Internal code

Dash number

Recommended Land Pattern

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