SMT Power Inductors – DO3340P

- Excellent current handling – up to 3.5 Arms with an 8 A saturation current rating for a 10 µH part.

Designer’s Kit C310 contains 3 of each part
Core material Ferrite
Core and winding loss See www.coilcraft.com/coreloss
Terminations RoHS compliant electroplated gold (<50 µm) over nickel over phos bronze. Other terminations available at additional cost.
Weight 1.8 – 2.8 g
Ambient temperature –40°C to +85°C with Irms current
Maximum part temperature +105°C (ambient + temp rise)
Storage temperature Component: –40°C to +105°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 225 per 13” reel Plastic tape: 24 mm wide, 0.4 mm thick, 24 mm pocket spacing, 11.4 mm pocket depth
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

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

<table>
<thead>
<tr>
<th>Part number 1</th>
<th>L (µH)</th>
<th>±20%</th>
<th>DCR max (Ohms)</th>
<th>SRF typ (MHz)</th>
<th>Isat (A)</th>
<th>Irms (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DO3340P-103ML</td>
<td>10</td>
<td>0.040</td>
<td>35</td>
<td>8.0</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>DO3340P-153ML</td>
<td>15</td>
<td>0.050</td>
<td>18</td>
<td>7.0</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>DO3340P-223ML</td>
<td>22</td>
<td>0.066</td>
<td>13</td>
<td>5.5</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>DO3340P-333ML</td>
<td>33</td>
<td>0.080</td>
<td>11</td>
<td>4.0</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>DO3340P-473ML</td>
<td>47</td>
<td>0.110</td>
<td>9.0</td>
<td>3.8</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>DO3340P-683ML</td>
<td>68</td>
<td>0.17</td>
<td>7.0</td>
<td>3.0</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>DO3340P-104ML</td>
<td>100</td>
<td>0.22</td>
<td>5.5</td>
<td>2.5</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>DO3340P-154ML</td>
<td>150</td>
<td>0.34</td>
<td>4.5</td>
<td>2.0</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>DO3340P-224ML</td>
<td>220</td>
<td>0.44</td>
<td>3.5</td>
<td>1.6</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>DO3340P-334ML</td>
<td>330</td>
<td>0.70</td>
<td>3.0</td>
<td>1.2</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>DO3340P-474ML</td>
<td>470</td>
<td>0.95</td>
<td>2.5</td>
<td>1.0</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>DO3340P-684ML</td>
<td>680</td>
<td>1.15</td>
<td>2.0</td>
<td>1.0</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>DO3340P-105ML</td>
<td>1000</td>
<td>2.0</td>
<td>1.5</td>
<td>0.8</td>
<td>0.1</td>
<td></td>
</tr>
</tbody>
</table>

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

Packaging: D = 13″ machine-ready reel. EIA-481 embossed plastic tape (225 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 D instead.

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.
3. DC current at which inductance drops 10% (typ) from its value without current.
4. Current that causes a 20°C temperature rise from 25°C ambient
5. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

Designers’ Kit C310 contains 3 of each part
Core material Ferrite
Core and winding loss See www.coilcraft.com/coreloss
Terminations RoHS compliant electroplated gold (<50 µm) over nickel over phos bronze. Other terminations available at additional cost.
Weight 1.8 – 2.8 g
Ambient temperature –40°C to +85°C with Irms current
Maximum part temperature +105°C (ambient + temp rise)
Storage temperature Component: –40°C to +105°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 225 per 13” reel Plastic tape: 24 mm wide, 0.4 mm thick, 24 mm pocket spacing, 11.4 mm pocket depth
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

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

<table>
<thead>
<tr>
<th>Part number 1</th>
<th>L (µH)</th>
<th>±20%</th>
<th>DCR max (Ohms)</th>
<th>SRF typ (MHz)</th>
<th>Isat (A)</th>
<th>Irms (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DO3340P-103ML</td>
<td>10</td>
<td>0.040</td>
<td>35</td>
<td>8.0</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>DO3340P-153ML</td>
<td>15</td>
<td>0.050</td>
<td>18</td>
<td>7.0</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>DO3340P-223ML</td>
<td>22</td>
<td>0.066</td>
<td>13</td>
<td>5.5</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>DO3340P-333ML</td>
<td>33</td>
<td>0.080</td>
<td>11</td>
<td>4.0</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>DO3340P-473ML</td>
<td>47</td>
<td>0.110</td>
<td>9.0</td>
<td>3.8</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>DO3340P-683ML</td>
<td>68</td>
<td>0.17</td>
<td>7.0</td>
<td>3.0</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>DO3340P-104ML</td>
<td>100</td>
<td>0.22</td>
<td>5.5</td>
<td>2.5</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>DO3340P-154ML</td>
<td>150</td>
<td>0.34</td>
<td>4.5</td>
<td>2.0</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>DO3340P-224ML</td>
<td>220</td>
<td>0.44</td>
<td>3.5</td>
<td>1.6</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>DO3340P-334ML</td>
<td>330</td>
<td>0.70</td>
<td>3.0</td>
<td>1.2</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>DO3340P-474ML</td>
<td>470</td>
<td>0.95</td>
<td>2.5</td>
<td>1.0</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>DO3340P-684ML</td>
<td>680</td>
<td>1.15</td>
<td>2.0</td>
<td>1.0</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>DO3340P-105ML</td>
<td>1000</td>
<td>2.0</td>
<td>1.5</td>
<td>0.8</td>
<td>0.1</td>
<td></td>
</tr>
</tbody>
</table>

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

Packaging: D = 13″ machine-ready reel. EIA-481 embossed plastic tape (225 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 D instead.

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.
3. DC current at which inductance drops 10% (typ) from its value without current.
4. Current that causes a 20°C temperature rise from 25°C ambient
5. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

SPICE models

ON OUR WEB SITE

US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore +65-6484 8412 sales@coilcraft.com.sg

© Coilcraft Inc. 2017
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.
SMT Power Inductors – DO3340P Series

Typical L vs Frequency

Typical L vs Current

Dimensions are in inches

Internal code
Dash number

Start
Finish

Parts manufactured prior to that
date may have color dots. Visit
www.coilcraft.com/coilpower.cfm
for color dot marking details.

* Allow an additional 0.01/0.254
in length and 0.005/0.127 in
height for optional tin-lead and

Recommended
Land Pattern

www.coilcraft.com

© Coilcraft Inc. 2017
This product may not be used in medical or high
risk applications without prior Coilcraft approval.
Specification subject to change without notice.
Please check web site for latest information.

Document 171-2 Revised 01/12/11