SMT Power Inductors – LPO6610

- Very low profile - only 1.0 mm high!
- Handles current up to 1.7 Amps rms

**Designers Kit C367** 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** 91.0 – 95.0 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** 1000/7” reel Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 1.2 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>±20% max typ (Ohms)</th>
<th>SRF typ (MHz)</th>
<th>Isat (A)</th>
<th>Irms (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPO6610-122ML_</td>
<td>1.2</td>
<td>0.08</td>
<td>190</td>
<td>2.1</td>
<td>1.7</td>
</tr>
<tr>
<td>LPO6610-152ML_</td>
<td>1.5</td>
<td>0.10</td>
<td>140</td>
<td>1.9</td>
<td>1.5</td>
</tr>
<tr>
<td>LPO6610-222ML_</td>
<td>2.2</td>
<td>0.12</td>
<td>115</td>
<td>1.6</td>
<td>1.4</td>
</tr>
<tr>
<td>LPO6610-332ML_</td>
<td>3.3</td>
<td>0.16</td>
<td>90</td>
<td>1.3</td>
<td>1.2</td>
</tr>
<tr>
<td>LPO6610-472ML_</td>
<td>4.7</td>
<td>0.20</td>
<td>88</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>LPO6610-682ML_</td>
<td>6.8</td>
<td>0.32</td>
<td>66</td>
<td>0.90</td>
<td>0.85</td>
</tr>
<tr>
<td>LPO6610-103ML_</td>
<td>10</td>
<td>0.41</td>
<td>55</td>
<td>0.80</td>
<td>0.75</td>
</tr>
<tr>
<td>LPO6610-153ML_</td>
<td>15</td>
<td>0.55</td>
<td>42</td>
<td>0.65</td>
<td>0.60</td>
</tr>
<tr>
<td>LPO6610-223ML_</td>
<td>22</td>
<td>0.85</td>
<td>38</td>
<td>0.50</td>
<td>0.52</td>
</tr>
<tr>
<td>LPO6610-333ML_</td>
<td>33</td>
<td>1.3</td>
<td>29</td>
<td>0.40</td>
<td>0.42</td>
</tr>
<tr>
<td>LPO6610-473ML_</td>
<td>47</td>
<td>1.8</td>
<td>22</td>
<td>0.35</td>
<td>0.36</td>
</tr>
<tr>
<td>LPO6610-683ML_</td>
<td>68</td>
<td>2.5</td>
<td>18</td>
<td>0.30</td>
<td>0.30</td>
</tr>
<tr>
<td>LPO6610-104ML_</td>
<td>100</td>
<td>3.5</td>
<td>14</td>
<td>0.25</td>
<td>0.26</td>
</tr>
<tr>
<td>LPO6610-154ML_</td>
<td>150</td>
<td>5.0</td>
<td>12</td>
<td>0.18</td>
<td>0.21</td>
</tr>
<tr>
<td>LPO6610-224ML_</td>
<td>220</td>
<td>7.0</td>
<td>10</td>
<td>0.16</td>
<td>0.18</td>
</tr>
<tr>
<td>LPO6610-334ML_</td>
<td>330</td>
<td>15.0</td>
<td>8</td>
<td>0.13</td>
<td>0.13</td>
</tr>
</tbody>
</table>

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

LPO6610-334MLC

**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).

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, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.
3. DC current at which the inductance drops 10% (typ) from its value without current.
4. Current that causes a 40°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

Coilcraft
www.coilcraft.com

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

Document 333-1  Revised 06/07/17
© Coilcraft Inc. 2021
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 - LPO6610 Series

Typical L vs Frequency

Typical L vs Current

Dimensions are in inches

Note: Dimensions are before optional solder application. For dimensions including solder, add 0.005 in / 0.127 mm.

© Coilcraft Inc. 2021
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