Shielded Power Inductors – SLC1480

• Requires a mere quarter square inch of board space
• Handles current as high as 130 A.
• Ideal for use in multi-phase VRM/VRD regulators

Designer’s Kit C467 contains 3 each of select values.

Core material Ferrite

Terminations RoHS compliant matte tin over nickel over copper. Other terminations available at additional cost.

Weight 5.25 g

Ambient temperature –40°C to +85°C with (40°C rise) Irms current.

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

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 Plastic tape: 24 mm wide, 0.4 mm thick, 16 mm pocket spacing, 8.1 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>Inductance (nH)</th>
<th>DCR (mOhms)</th>
<th>SRF typ (MHz)</th>
<th>Isat (A)</th>
<th>Irms (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLC1480-111ML</td>
<td>110</td>
<td>0.15</td>
<td>0.21</td>
<td>130</td>
<td>110</td>
</tr>
<tr>
<td>SLC1480-131ML</td>
<td>130</td>
<td>0.15</td>
<td>0.21</td>
<td>110</td>
<td>97</td>
</tr>
<tr>
<td>SLC1480-151ML</td>
<td>150</td>
<td>0.15</td>
<td>0.21</td>
<td>108</td>
<td>88</td>
</tr>
<tr>
<td>SLC1480-171ML</td>
<td>170</td>
<td>0.15</td>
<td>0.21</td>
<td>75</td>
<td>80</td>
</tr>
<tr>
<td>SLC1480-201ML</td>
<td>200</td>
<td>0.15</td>
<td>0.21</td>
<td>68</td>
<td>65</td>
</tr>
<tr>
<td>SLC1480-231ML</td>
<td>230</td>
<td>0.15</td>
<td>0.21</td>
<td>59</td>
<td>57</td>
</tr>
<tr>
<td>SLC1480-261ML</td>
<td>260</td>
<td>0.15</td>
<td>0.21</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>SLC1480-301ML</td>
<td>300</td>
<td>0.15</td>
<td>0.21</td>
<td>46</td>
<td>42</td>
</tr>
<tr>
<td>SLC1480-321ML</td>
<td>320</td>
<td>0.15</td>
<td>0.21</td>
<td>42</td>
<td>38</td>
</tr>
<tr>
<td>SLC1480-441ML</td>
<td>440</td>
<td>0.15</td>
<td>0.21</td>
<td>35</td>
<td>28</td>
</tr>
</tbody>
</table>

1. When ordering, please specify packaging code:

SLC1480-321MLD
Packaging: D = 13″ machine-ready reel. EIA-481 embossed plastic tape (500 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.

2. Inductance tested at 100 kHz, 0.1 Vrms using an Agilent/HP 4284.
3. DCR is measured between the two points indicated below.

4. SRF measured using an Agilent/HP 8753ES network analyzer or equivalent.
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.

Irms Testing
Irms testing was performed on 0.75 inch wide × 0.25 inch thick copper traces in still air.
Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.
Shielded Power Inductors – SLC1480 Series

L vs Current

L vs Frequency

Recommended Land Pattern

Dimensions are in inches

Dash number

Internal code

© Coilcraft Inc. 2018

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.