Shielded Power Inductors – VER2923

• Designed for high current power supply applications with saturation current ratings to over 100 Amps
• Ideal for use in Class-D applications
• Flat wire windings provide extremely low DC and AC resistance
• Vertical mounting provides a small footprint

Core material Ferrite
Core and winding loss See www.coilcraft.com/coreloss
Terminations RoHS compliant tin-silver over copper. Other terminations available at additional cost.
Weight 37 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
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 25 parts per tray
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(^1) (µH)</th>
<th>DCR (mOhms)(^2)</th>
<th>SRF typ(^3) (MHz)</th>
<th>Isat (A)(^4)</th>
<th>Irms (A)(^5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>nom</td>
<td>max</td>
<td></td>
<td>10% drop 20% drop 30% drop</td>
<td>20°C rise 40°C rise</td>
</tr>
<tr>
<td>VER2923-332KL</td>
<td>3.3</td>
<td>2.3</td>
<td>2.6</td>
<td>40</td>
<td>95.0</td>
</tr>
<tr>
<td>VER2923-472KL</td>
<td>4.7</td>
<td>2.3</td>
<td>2.6</td>
<td>30</td>
<td>63.0</td>
</tr>
<tr>
<td>VER2923-682KL</td>
<td>6.8</td>
<td>2.3</td>
<td>2.6</td>
<td>25</td>
<td>48.0</td>
</tr>
<tr>
<td>VER2923-103KL</td>
<td>10</td>
<td>2.3</td>
<td>2.6</td>
<td>20</td>
<td>30.0</td>
</tr>
<tr>
<td>VER2923-153KL</td>
<td>15</td>
<td>2.3</td>
<td>2.6</td>
<td>16</td>
<td>20.5</td>
</tr>
<tr>
<td>VER2923-223KL</td>
<td>22</td>
<td>2.3</td>
<td>2.6</td>
<td>13</td>
<td>12.2</td>
</tr>
<tr>
<td>VER2923-333KL</td>
<td>33</td>
<td>2.3</td>
<td>2.6</td>
<td>10</td>
<td>7.5</td>
</tr>
</tbody>
</table>

1. Inductance tested at 300 kHz, 0.1 Vrms on Agilent/HP 4192A.
2. DCR measured on a Keithley 580 micro-ohmmeter or equivalent.
3. SRF measured on an Agilent/HP 8753ES network analyzer.
4. DC current at 25°C that causes the specified inductance drop from its value without current. Click for temperature derating information.
5. 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.

Caution:
This series is not intended for use in high vibration environments. We advise using additional means of securing the part to the circuit board to ensure its adhesion.
Shielded Power Inductors – VER2923 Series

L vs Current

L vs Frequency

Dimensions are in inches

Recommended PC Board Layout