Features
■ Available in E12 series
■ Unit height of 6.8 mm
■ Current up to 8 A Isat
■ RoHS compliant*

Applications
■ Input/output of DC/DC converters
■ Power supplies for:
  • Portable communication equipment
  • Camcorders
  • LCD TVs

SRR1806 Series - Shielded Power Inductors

Electrical Characteristics

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Inductance (μH)</th>
<th>Q</th>
<th>Test Frequency (MHz)</th>
<th>SRF Typ. (MHz)</th>
<th>RDC ±20 % (Ω)</th>
<th>I rms Max. (A)</th>
<th>I sat Typ. (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRR1806-100M</td>
<td>10.0 ± 20</td>
<td>56</td>
<td>2.52</td>
<td>19.0</td>
<td>0.033</td>
<td>4.00</td>
<td>8.20</td>
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<tr>
<td>SRR1806-150M</td>
<td>15.0 ± 20</td>
<td>53</td>
<td>2.52</td>
<td>17.5</td>
<td>0.039</td>
<td>3.80</td>
<td>7.20</td>
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<tr>
<td>SRR1806-220M</td>
<td>22.0 ± 20</td>
<td>51</td>
<td>2.52</td>
<td>16.0</td>
<td>0.053</td>
<td>3.00</td>
<td>6.20</td>
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<tr>
<td>SRR1806-330M</td>
<td>33.0 ± 20</td>
<td>44</td>
<td>2.52</td>
<td>10.0</td>
<td>0.083</td>
<td>2.50</td>
<td>5.00</td>
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<td>SRR1806-470M</td>
<td>47.0 ± 20</td>
<td>40</td>
<td>2.52</td>
<td>8.0</td>
<td>0.110</td>
<td>2.00</td>
<td>4.20</td>
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<tr>
<td>SRR1806-680M</td>
<td>68.0 ± 20</td>
<td>37</td>
<td>2.52</td>
<td>6.0</td>
<td>0.170</td>
<td>1.60</td>
<td>3.40</td>
</tr>
<tr>
<td>SRR1806-101M</td>
<td>100.0 ± 20</td>
<td>40</td>
<td>0.796</td>
<td>4.6</td>
<td>0.270</td>
<td>1.30</td>
<td>2.60</td>
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<tr>
<td>SRR1806-151M</td>
<td>150.0 ± 20</td>
<td>39</td>
<td>0.796</td>
<td>4.3</td>
<td>0.400</td>
<td>1.05</td>
<td>2.30</td>
</tr>
<tr>
<td>SRR1806-221M</td>
<td>220.0 ± 20</td>
<td>29</td>
<td>0.796</td>
<td>3.5</td>
<td>0.510</td>
<td>1.00</td>
<td>1.90</td>
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<tr>
<td>SRR1806-331M</td>
<td>330.0 ± 20</td>
<td>30</td>
<td>0.796</td>
<td>3.0</td>
<td>0.790</td>
<td>0.80</td>
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<tr>
<td>SRR1806-471M</td>
<td>470.0 ± 20</td>
<td>27</td>
<td>0.796</td>
<td>2.4</td>
<td>1.000</td>
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<tr>
<td>SRR1806-681M</td>
<td>680.0 ± 20</td>
<td>19</td>
<td>0.796</td>
<td>2.1</td>
<td>1.470</td>
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<td>SRR1806-102M</td>
<td>1000.0 ± 20</td>
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<td>0.796</td>
<td>1.5</td>
<td>2.160</td>
<td>0.45</td>
<td>0.90</td>
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</tbody>
</table>

General Specifications
Test Voltage ......................... 0.1 V
Reflow soldering......250 °C; 10 sec max.
(Compliance with JEDEC, J-STD-020C, Table 4-2)
Operating Temperature -40 °C to +125 °C
(Temperature rise included)
Storage Temperature -45 °C to +125 °C
Resistance to Soldering Heat
................................250 °C, 10 sec. max.
Moisture Sensitivity Level..............1
ESD Classification (HBM)..............N/A

Materials
Core.................................... Ferrite core
Wire............................ Enameled copper
Base ..................................... LCP E4008
Terminal................................Cu/Ni/Sn
Rated Current Ind. drop 10 % typ. at Isat
Temperature Rise
..................40 °C max. at rated Irms
Packaging.................250 pcs. per reel

Soldering Profile

![Soldering Profile Diagram]

Schematic

![Schematic Diagram]

WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov
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