SRP0410 Series - Shielded Power Inductors

Features
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- RoHS compliant* and halogen free**

Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Inductance @ 100 kHz / 1 V Q</th>
<th>Q Typ.</th>
<th>Q Test Freq. (MHz)</th>
<th>SRF (MHz) Typ.</th>
<th>DCR (mΩ) Typ.</th>
<th>DCR (mΩ) Max.</th>
<th>Irms (A) Typ.</th>
<th>Isat (A) Typ.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRP0410-R47K</td>
<td>0.47 10</td>
<td>21</td>
<td>25.2</td>
<td>82</td>
<td>29.0</td>
<td>35.3</td>
<td>5.2</td>
<td>9.2</td>
</tr>
<tr>
<td>SRP0410-R68K</td>
<td>0.68 10</td>
<td>16</td>
<td>25.2</td>
<td>71</td>
<td>29.5</td>
<td>36.0</td>
<td>5.2</td>
<td>7.0</td>
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<tr>
<td>SRP0410-1R0K</td>
<td>1.00 10</td>
<td>20</td>
<td>7.96</td>
<td>52</td>
<td>37.5</td>
<td>42.5</td>
<td>4.5</td>
<td>5.3</td>
</tr>
<tr>
<td>SRP0410-1R5K</td>
<td>1.50 10</td>
<td>35</td>
<td>7.96</td>
<td>40</td>
<td>56.0</td>
<td>64.0</td>
<td>3.9</td>
<td>4.8</td>
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<tr>
<td>SRP0410-2R2K</td>
<td>2.20 10</td>
<td>22</td>
<td>7.96</td>
<td>33</td>
<td>75.0</td>
<td>87.0</td>
<td>3.0</td>
<td>3.9</td>
</tr>
<tr>
<td>SRP0410-3R3K</td>
<td>3.30 10</td>
<td>20</td>
<td>7.96</td>
<td>29</td>
<td>100.0</td>
<td>120.0</td>
<td>2.4</td>
<td>3.3</td>
</tr>
<tr>
<td>SRP0410-4R7K</td>
<td>4.70 10</td>
<td>21</td>
<td>7.96</td>
<td>26</td>
<td>180.0</td>
<td>210.0</td>
<td>1.9</td>
<td>2.8</td>
</tr>
<tr>
<td>SRP0410-6R8K</td>
<td>6.80 10</td>
<td>12</td>
<td>7.96</td>
<td>20</td>
<td>201.0</td>
<td>245.0</td>
<td>1.8</td>
<td>2.1</td>
</tr>
<tr>
<td>SRP0410-100K</td>
<td>10.0 10</td>
<td>20</td>
<td>2.52</td>
<td>16</td>
<td>298.0</td>
<td>350.0</td>
<td>1.4</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Product Dimensions

Recommended Layout

General Specifications

Operating Temperature
-40 °C to +125 °C (Temperature rise included)

Storage Temperature (Component)
-40 °C to +125 °C

Rated Current
Inductance drops 30 % at Isat

Temperature Rise ...
40 °C at rated Irms

Rated Voltage ...50 V

Moisture Sensitivity Level...............1

ESD Classification (HBM).................N/A

Materials
Core......................................Metal alloy powder
Wire......................................Enamelled copper
Terminal Finish..........................Sn

Packaging.....4000 pcs. per 13-inch reel

How to Order
SRP0410 - 4R7K

Model
Value Code (see table)

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

** Bourns considers a product to be “halogen free” if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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Soldering Profile

Peak Temperature: 260 °C max.
Max. Peak Temperature -5 °C: 30 sec. max.
Max. Time Above 217 °C: 60-150 sec. max.

<table>
<thead>
<tr>
<th>Temperature Rising Area</th>
<th>Preheat Area</th>
<th>Reflow Area</th>
<th>Forced Cooling Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>-4.0 °C/Sec. Max.</td>
<td>150-200 °C / 60-120 Sec.</td>
<td>+3.0 °C/Sec. Max.</td>
<td>&lt;1.0-5.0) °C/Sec. Max.</td>
</tr>
</tbody>
</table>

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Packaging Specifications

Dimensions: MM (INCHES)

USER DIRECTION OF FEED
QTY: 4,000 PCS PER REEL

END 8 4 TRAILER

LEADER NO COMPONENT MIN.

COMPONENTS

TRAILER NO COMPONENT MIN.

MIN.

MAX.

COVER TAPE

EMBOSSED CARRIER

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The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com
www.bourns.com

REV. 05/20
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