Features
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Inductance range: 0.10 to 22 µH
- RoHS compliant* and halogen free**

SRP7028C Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Inductance @ 100 kHz / 1 V</th>
<th>Q (Min.) @ 100 kHz / 1 V</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>
<th>Terminal Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRP7028C-R10M</td>
<td>0.10 ± 20</td>
<td>5</td>
<td>196</td>
<td>1.2</td>
<td>1.7</td>
<td>37.5</td>
<td>60.0</td>
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<tr>
<td>SRP7028C-R15M</td>
<td>0.15 ± 20</td>
<td>5</td>
<td>190</td>
<td>1.5</td>
<td>1.9</td>
<td>27.0</td>
<td>50.0</td>
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<tr>
<td>SRP7028C-R24M</td>
<td>0.24 ± 30</td>
<td>10</td>
<td>118</td>
<td>2.5</td>
<td>3.1</td>
<td>23.0</td>
<td>39.0</td>
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<tr>
<td>SRP7028C-R25M</td>
<td>0.25 ± 20</td>
<td>10</td>
<td>118</td>
<td>2.5</td>
<td>3.1</td>
<td>23.0</td>
<td>39.0</td>
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<tr>
<td>SRP7028C-R33M</td>
<td>0.33 ± 20</td>
<td>10</td>
<td>115</td>
<td>3.5</td>
<td>3.9</td>
<td>20.0</td>
<td>32.0</td>
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<tr>
<td>SRP7028C-R47M</td>
<td>0.47 ± 20</td>
<td>10</td>
<td>62</td>
<td>4.0</td>
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<td>17.5</td>
<td>27.0</td>
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<tr>
<td>SRP7028C-R68M</td>
<td>0.68 ± 20</td>
<td>15</td>
<td>55</td>
<td>4.8</td>
<td>5.5</td>
<td>15.5</td>
<td>25.0</td>
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<tr>
<td>SRP7028C-1R0M</td>
<td>1.00 ± 20</td>
<td>15</td>
<td>45</td>
<td>8.3</td>
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<td>11.0</td>
<td>22.0</td>
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<tr>
<td>SRP7028C-1R5M</td>
<td>1.50 ± 20</td>
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<td>40</td>
<td>11.0</td>
<td>14.0</td>
<td>9.0</td>
<td>18.0</td>
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<tr>
<td>SRP7028C-2R2M</td>
<td>2.20 ± 20</td>
<td>15</td>
<td>32</td>
<td>15.0</td>
<td>18.0</td>
<td>8.0</td>
<td>14.0</td>
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<tr>
<td>SRP7028C-3R3M</td>
<td>3.30 ± 20</td>
<td>15</td>
<td>25</td>
<td>27.0</td>
<td>30.0</td>
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<tr>
<td>SRP7028C-4R7M</td>
<td>4.70 ± 20</td>
<td>15</td>
<td>21</td>
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<td>40.0</td>
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<td>10.0</td>
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<td>SRP7028C-6R8M</td>
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<td>16</td>
<td>54.0</td>
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<td>8.3</td>
<td></td>
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<tr>
<td>SRP7028C-8R2M</td>
<td>8.20 ± 20</td>
<td>15</td>
<td>15</td>
<td>60.0</td>
<td>66.0</td>
<td>4.1</td>
<td>6.8</td>
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<td>SRP7028C-100M</td>
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<td>20</td>
<td>12</td>
<td>107.0</td>
<td>123.0</td>
<td>3.0</td>
<td>4.0</td>
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<td>SRP7028C-220M</td>
<td>22.00 ± 20</td>
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<td>155.0</td>
<td>180.0</td>
<td>2.2</td>
<td>3.6</td>
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</tbody>
</table>

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

Moisture Sensitivity Level
1

ESD Classification (HBM)
N/A

How to Order

SRP7028C - 100M

Model Value Code (see table)

Soldering Profile

PRE-HEATING
SOLDERING
NATURAL COOLING

T_p (260 °C / 10 seconds max.)

Temperature (°C) Time (Seconds)

377 150 150 60 - 180 seconds
260 150 60 - 180 seconds
205 150 480 seconds max.

REFLOW TIMES: 3 MAX.

Soldering Profile

Dimensions: MM

Recommended Layout

Dimensions: INCHES

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. Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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SRP7028C Series - Shielded Power Inductors

L vs. I Charts (Continued)

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