SRR1280A Series - Shielded Power Inductors

**Features**
- Shielded construction
- Inductance range: 4.7 to 1000 µH
- Heating current up to 8.2 A
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

**Electrical Specifications @ 25 °C**

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Inductance (µH)</th>
<th>Q (Ref.)</th>
<th>Test Freq. (MHz)</th>
<th>SRF (MHz)</th>
<th>DCR (mΩ)</th>
<th>I rms (A)</th>
<th>I sat (A)</th>
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</thead>
<tbody>
<tr>
<td>SRR1280A-4R7Y</td>
<td>4.7 ±30</td>
<td>100 KHz/1 V</td>
<td>22</td>
<td>7.96</td>
<td>30</td>
<td>15.5</td>
<td>8.20</td>
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<tr>
<td>SRR1280A-6R8Y</td>
<td>6.8 ±30</td>
<td>100 KHz/1 V</td>
<td>20</td>
<td>7.96</td>
<td>22</td>
<td>18.5</td>
<td>7.60</td>
</tr>
<tr>
<td>SRR1280A-8R2Y</td>
<td>8.2 ±30</td>
<td>100 KHz/1 V</td>
<td>22</td>
<td>7.96</td>
<td>20</td>
<td>20.5</td>
<td>6.20</td>
</tr>
<tr>
<td>SRR1280A-100M</td>
<td>10 ±20</td>
<td>1 KHz/1 V</td>
<td>24</td>
<td>2.52</td>
<td>17</td>
<td>19.5</td>
<td>6.00</td>
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<tr>
<td>SRR1280A-120M</td>
<td>12 ±20</td>
<td>1 KHz/1 V</td>
<td>26</td>
<td>2.52</td>
<td>15</td>
<td>28.0</td>
<td>5.60</td>
</tr>
<tr>
<td>SRR1280A-150M</td>
<td>15 ±20</td>
<td>1 KHz/1 V</td>
<td>26</td>
<td>2.52</td>
<td>13</td>
<td>28.5</td>
<td>5.20</td>
</tr>
<tr>
<td>SRR1280A-180M</td>
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<td>1 KHz/1 V</td>
<td>24</td>
<td>2.52</td>
<td>12</td>
<td>35.0</td>
<td>4.80</td>
</tr>
<tr>
<td>SRR1280A-220M</td>
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<td>11</td>
<td>38.6</td>
<td>4.30</td>
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<tr>
<td>SRR1280A-270M</td>
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<td>2.52</td>
<td>10</td>
<td>52.0</td>
<td>3.90</td>
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<tr>
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<td>9.5</td>
<td>57.0</td>
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<td>7.5</td>
<td>80.0</td>
<td>2.90</td>
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<td>SRR1280A-470M</td>
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<td>1 KHz/1 V</td>
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<td>7</td>
<td>100.0</td>
<td>2.60</td>
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<td>SRR1280A-560M</td>
<td>56 ±20</td>
<td>1 KHz/1 V</td>
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<td>2.52</td>
<td>6.5</td>
<td>120.0</td>
<td>2.40</td>
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<tr>
<td>SRR1280A-680M</td>
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<td>1 KHz/1 V</td>
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<td>5</td>
<td>130.0</td>
<td>2.20</td>
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<td>SRR1280A-820M</td>
<td>82 ±20</td>
<td>1 KHz/1 V</td>
<td>18</td>
<td>0.796</td>
<td>4.5</td>
<td>150.0</td>
<td>2.00</td>
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<tr>
<td>SRR1280A-101M</td>
<td>100 ±20</td>
<td>1 KHz/1 V</td>
<td>16</td>
<td>0.796</td>
<td>4.3</td>
<td>200.0</td>
<td>1.95</td>
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<tr>
<td>SRR1280A-121K</td>
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<td>1 KHz/1 V</td>
<td>24</td>
<td>0.796</td>
<td>4.1</td>
<td>270.0</td>
<td>1.85</td>
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<tr>
<td>SRR1280A-151K</td>
<td>150 ±10</td>
<td>1 KHz/1 V</td>
<td>24</td>
<td>0.796</td>
<td>4</td>
<td>300.0</td>
<td>1.75</td>
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<td>SRR1280A-181K</td>
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<td>1 KHz/1 V</td>
<td>24</td>
<td>0.796</td>
<td>3.4</td>
<td>400.0</td>
<td>1.60</td>
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<td>SRR1280A-221K</td>
<td>220 ±10</td>
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<td>450.0</td>
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<td>SRR1280A-271K</td>
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<td>0.796</td>
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<td>SRR1280A-331K</td>
<td>330 ±10</td>
<td>1 KHz/1 V</td>
<td>20</td>
<td>0.796</td>
<td>2.6</td>
<td>680.0</td>
<td>1.00</td>
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<td>390 ±10</td>
<td>1 KHz/1 V</td>
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<td>0.796</td>
<td>2.2</td>
<td>880.0</td>
<td>0.90</td>
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<tr>
<td>SRR1280A-471K</td>
<td>470 ±10</td>
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<td>20</td>
<td>0.796</td>
<td>2</td>
<td>900.0</td>
<td>0.80</td>
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<td>SRR1280A-561K</td>
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<td>20</td>
<td>0.796</td>
<td>1.7</td>
<td>1300.0</td>
<td>0.75</td>
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<td>SRR1280A-681K</td>
<td>680 ±10</td>
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<td>26</td>
<td>0.796</td>
<td>1.4</td>
<td>1500.0</td>
<td>0.70</td>
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<td>SRR1280A-821K</td>
<td>820 ±10</td>
<td>1 KHz/1 V</td>
<td>20</td>
<td>0.796</td>
<td>1.1</td>
<td>1800.0</td>
<td>0.68</td>
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<tr>
<td>SRR1280A-102K</td>
<td>1000 ±10</td>
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<td>40</td>
<td>0.252</td>
<td>1.3</td>
<td>1700.0</td>
<td>0.68</td>
</tr>
</tbody>
</table>

**How to Order**

Model: SRR1280A - 100M

**Electrical Schematic**

**General Specifications**

Operating Temp. ..........-40 °C to +125 °C (Temperature rise included)
Storage Temp. ..........-40 °C to +125 °C
Temperature Rise ..........40 °C typ. at rated I rms
Inductance Drop ..........25 % typ. at I sat
Moisture Sensitivity Level ..........1
ESD Classification (HBM) ..........N/A

**Materials**

Core: Ferite Wire: Enameled copper Terminal Finish: Sn Packaging: 400 pcs. per reel

**Product Dimensions**

Dimensions: MM

**Recommended Layout**

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** 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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**SRR1280A Series - Shielded Power Inductors**

### Temperature vs. IDC

**SRR1280A-4R7Y**

- δT (°C) vs. IDC (A)

**SRR1280A-270M**

- δT (°C) vs. IDC (A)

**SRR1280A-471K**

- δT (°C) vs. IDC (A)

**SRR1280A-102K**

- δT (°C) vs. IDC (A)

### Packaging Specifications

**DIMENSIONS:**

- **MM**
  - 330 (12.99)
  - 2.0 ± 0.5 (0.063 ± 0.013)
  - 30.4 (1.197)
  - 8.0 ± 0.05 (0.315 ± 0.020)
  - 21.0 ± 0.8 (0.827 ± 0.031)
  - 13.0 (0.512)
  - 60.0 - 0 (2.362 ± 0)
  - 26.0 (1.024 ± 0)

- **INCHES**
  - 24 (0.945)

**THICKNESS:**

- 0.10 (0.04)

**EMBOSSED CAVITY:**

- 24.0 (0.945)

**USER DIRECTION OF FEED:**

- QTY: 400 PCS. PER REEL

REV. 11/19

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