Features

- Available in E12 series
- Height of 2.9 mm
- Current rating up to 2.1 A
- RoHS compliant*

Applications

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

SRR0905 Series - Shielded SMD Power Inductors

### Electrical Specifications

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Inductance (μH)</th>
<th>Q Ref.</th>
<th>Test Frequency (MHz)</th>
<th>SRF Typ. (MHz)</th>
<th>DCR Max. (Ω)</th>
<th>Idc (A)</th>
<th>**K-Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRR0905-100M</td>
<td>10 ± 20</td>
<td>39</td>
<td>2.52</td>
<td>29</td>
<td>0.06</td>
<td>2.1</td>
<td>77</td>
</tr>
<tr>
<td>SRR0905-120M</td>
<td>12 ± 20</td>
<td>40</td>
<td>2.52</td>
<td>26</td>
<td>0.07</td>
<td>1.9</td>
<td>65</td>
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<tr>
<td>SRR0905-150M</td>
<td>15 ± 20</td>
<td>35</td>
<td>2.52</td>
<td>24</td>
<td>0.07</td>
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<tr>
<td>SRR0905-180M</td>
<td>18 ± 20</td>
<td>39</td>
<td>2.52</td>
<td>21</td>
<td>0.08</td>
<td>1.6</td>
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<tr>
<td>SRR0905-220M</td>
<td>22 ± 20</td>
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<td>2.52</td>
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<td>SRR0905-270M</td>
<td>27 ± 20</td>
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<td>17</td>
<td>0.10</td>
<td>1.3</td>
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</tr>
<tr>
<td>SRR0905-330Y</td>
<td>33 ± 15</td>
<td>27</td>
<td>2.52</td>
<td>14</td>
<td>0.11</td>
<td>1.2</td>
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<tr>
<td>SRR0905-390Y</td>
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<td>0.12</td>
<td>1.1</td>
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<tr>
<td>SRR0905-470Y</td>
<td>47 ± 15</td>
<td>27</td>
<td>2.52</td>
<td>11</td>
<td>0.14</td>
<td>1.0</td>
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<td>SRR0905-560Y</td>
<td>56 ± 15</td>
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<td>2.52</td>
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<td>0.19</td>
<td>0.93</td>
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<td>SRR0905-680Y</td>
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<td>0.21</td>
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<td>SRR0905-820Y</td>
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<td>SRR0905-101K</td>
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<td>0.796</td>
<td>8</td>
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<td>0.72</td>
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<tr>
<td>SRR0905-121K</td>
<td>120 ± 10</td>
<td>31</td>
<td>0.796</td>
<td>7</td>
<td>0.37</td>
<td>0.63</td>
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<td>SRR0905-151K</td>
<td>150 ± 10</td>
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<td>0.796</td>
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<td>SRR0905-181K</td>
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<td>0.796</td>
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<td>0.57</td>
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<td>SRR0905-221K</td>
<td>220 ± 10</td>
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<td>0.796</td>
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<td>0.78</td>
<td>0.47</td>
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<tr>
<td>SRR0905-271K</td>
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<td>0.796</td>
<td>5</td>
<td>0.87</td>
<td>0.41</td>
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<tr>
<td>SRR0905-331K</td>
<td>330 ± 10</td>
<td>29</td>
<td>0.796</td>
<td>4</td>
<td>1.20</td>
<td>0.37</td>
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<tr>
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<td>0.796</td>
<td>3</td>
<td>1.34</td>
<td>0.35</td>
<td>11</td>
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<tr>
<td>SRR0905-471K</td>
<td>470 ± 10</td>
<td>26</td>
<td>0.796</td>
<td>3</td>
<td>1.50</td>
<td>0.33</td>
<td>10</td>
</tr>
</tbody>
</table>

**K-Factor: To calculate core flux density, Bp-p (gauss) = K x LμH x A I (peak-to-peak ripple current, A), determine core loss from Core Loss vs. Flux Density plot.**

### Core Loss vs. Flux Density

![Core Loss vs. Flux Density Graph](image)

### General Specifications

- Inductance Test Frequency/Voltage
  - SRR0905-100M to -820Y...2.52 MHz/1 V
  - SRR0905-101K to -471K...1 kHz/1 V
- Reflow Soldering...230 °C, 50 sec. max. Operating Temperature...-40 °C to +125 °C (Temperature rise included)
- Storage Temperature...-40 °C to +125 °C
- Resistance to Soldering Heat...260 °C for 5 sec.
- Moisture Sensitivity Level...1

### Materials

- Core Material: Ferrite DR & RI
- Wire: Enamed copper
- Terminal: Ag/Ni/Sn
- Rated Current: Ind. drop of 10 % typ. at Isat
- Temperature Rise: 15 °C typ. at rated Irms
- Packaging: 800 pcs. per reel

### Recommended Layout

![Recommended Layout Diagram](image)

### Product Dimensions

![Product Dimensions Diagram](image)

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**WARNING** Cancer and Reproductive Harm - www.P65Warnings.ca.gov
SRR0905 Series - Shielded SMD Power Inductors

Soldering Profile

Schematic

Inductance vs. Current

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SRR0905 Series - Shielded SMD Power Inductors

Packaging Specifications

Dimensions: MM

QTY: 800 PCS. PER REEL

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