Features

- Shielded construction
- Inductance range: 10 to 680 µH
- Heating current up to 2.1 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

SRR0735A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Inductance @ 1 KHz / 1 V</th>
<th>DCR (Ω) Max.</th>
<th>I rms (A)</th>
<th>I sat (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRR0735A-100M</td>
<td>10 ±20</td>
<td>0.072</td>
<td>2.10</td>
<td>1.85</td>
</tr>
<tr>
<td>SRR0735A-120M</td>
<td>12 ±20</td>
<td>0.085</td>
<td>1.90</td>
<td>1.60</td>
</tr>
<tr>
<td>SRR0735A-150M</td>
<td>15 ±20</td>
<td>0.105</td>
<td>1.60</td>
<td>1.52</td>
</tr>
<tr>
<td>SRR0735A-180M</td>
<td>18 ±20</td>
<td>0.125</td>
<td>1.40</td>
<td>1.40</td>
</tr>
<tr>
<td>SRR0735A-220M</td>
<td>22 ±20</td>
<td>0.160</td>
<td>1.20</td>
<td>1.28</td>
</tr>
<tr>
<td>SRR0735A-270M</td>
<td>27 ±20</td>
<td>0.185</td>
<td>1.10</td>
<td>1.15</td>
</tr>
<tr>
<td>SRR0735A-330M</td>
<td>33 ±20</td>
<td>0.220</td>
<td>1.00</td>
<td>1.04</td>
</tr>
<tr>
<td>SRR0735A-390M</td>
<td>39 ±20</td>
<td>0.250</td>
<td>0.95</td>
<td>0.96</td>
</tr>
<tr>
<td>SRR0735A-470M</td>
<td>47 ±20</td>
<td>0.320</td>
<td>0.85</td>
<td>0.88</td>
</tr>
<tr>
<td>SRR0735A-560M</td>
<td>56 ±20</td>
<td>0.350</td>
<td>0.78</td>
<td>0.80</td>
</tr>
<tr>
<td>SRR0735A-680M</td>
<td>68 ±20</td>
<td>0.400</td>
<td>0.72</td>
<td>0.74</td>
</tr>
<tr>
<td>SRR0735A-820M</td>
<td>82 ±20</td>
<td>0.480</td>
<td>0.63</td>
<td>0.65</td>
</tr>
<tr>
<td>SRR0735A-101M</td>
<td>100 ±20</td>
<td>0.630</td>
<td>0.54</td>
<td>0.60</td>
</tr>
<tr>
<td>SRR0735A-121M</td>
<td>120 ±20</td>
<td>0.720</td>
<td>0.53</td>
<td>0.55</td>
</tr>
<tr>
<td>SRR0735A-151M</td>
<td>150 ±20</td>
<td>0.930</td>
<td>0.47</td>
<td>0.48</td>
</tr>
<tr>
<td>SRR0735A-181M</td>
<td>180 ±20</td>
<td>1.15</td>
<td>0.43</td>
<td>0.45</td>
</tr>
<tr>
<td>SRR0735A-221M</td>
<td>220 ±20</td>
<td>1.32</td>
<td>0.40</td>
<td>0.42</td>
</tr>
<tr>
<td>SRR0735A-271M</td>
<td>270 ±20</td>
<td>1.70</td>
<td>0.37</td>
<td>0.37</td>
</tr>
<tr>
<td>SRR0735A-331M</td>
<td>330 ±20</td>
<td>2.00</td>
<td>0.33</td>
<td>0.33</td>
</tr>
<tr>
<td>SRR0735A-391M</td>
<td>390 ±20</td>
<td>2.30</td>
<td>0.30</td>
<td>0.30</td>
</tr>
<tr>
<td>SRR0735A-471M</td>
<td>470 ±20</td>
<td>2.80</td>
<td>0.26</td>
<td>0.27</td>
</tr>
<tr>
<td>SRR0735A-561M</td>
<td>560 ±20</td>
<td>3.50</td>
<td>0.23</td>
<td>0.25</td>
</tr>
<tr>
<td>SRR0735A-681M</td>
<td>680 ±20</td>
<td>4.00</td>
<td>0.21</td>
<td>0.22</td>
</tr>
</tbody>
</table>

How to Order

SRR0735A - 100M

Model Value Code (see table)

Soldering Profile

General Specifications

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

Storage Temperature
-40 °C to +125 °C

Resistance to Soldering Heat
+250 °C for 10 sec.

Temperature Rise
40 °C typ. at rated I rms
Inductance Drop ....... 25 % typ. at I sat

Materials

Core.................................Ferrite
Wire............................Enameled copper
Terminal Finish ...............Sn
Packaging.................. 1500 pcs. per reel

Product Dimensions

Electrical Schematic

How to Order

SRR0735A - 100M

Model Value Code (see table)

Soldering Profile

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. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf
SRR0735A Series - Shielded Power Inductors

L vs. IDC

- **SRR0735A-100M**
  - L vs. IDC at 25 °C
  - L vs. IDC at 125 °C

- **SRR0735A-330M**
  - L vs. IDC at 25 °C
  - L vs. IDC at 125 °C

- **SRR0735A-101M**
  - L vs. IDC at 25 °C
  - L vs. IDC at 125 °C

- **SRR0735A-331M**
  - L vs. IDC at 25 °C
  - L vs. IDC at 125 °C

Temperature vs. IDC

- **SRR0735A-100M**
  - ΔT vs. IDC at 25 °C

- **SRR0735A-101M**
  - ΔT vs. IDC at 25 °C

- **SRR0735A-330M**
  - ΔT vs. IDC at 25 °C

- **SRR0735A-331M**
  - ΔT vs. IDC at 25 °C

Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf
Packaging Specifications

Dimensions: MM (INCHES)

QTY: 1500 PCS. PER REEL

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.
This legal disclaimer applies to purchasers and users of Bourns® products manufactured by or on behalf of Bourns, Inc. and its affiliates (collectively, “Bourns”).

Unless otherwise expressly indicated in writing, Bourns® products and data sheets relating thereto are subject to change without notice. Users should check for and obtain the latest relevant information and verify that such information is current and complete before placing orders for Bourns® products.

The characteristics and parameters of a Bourns® product set forth in its data sheet are based on laboratory conditions, and statements regarding the suitability of products for certain types of applications are based on Bourns’ knowledge of typical requirements in generic applications. The characteristics and parameters of a Bourns® product in a user application may vary from the data sheet characteristics and parameters due to (i) the combination of the Bourns® product with other components in the user’s application, or (ii) the environment of the user application itself. The characteristics and parameters of a Bourns® product also can and do vary in different applications and actual performance may vary over time. Users should always verify the actual performance of the Bourns® product in their specific devices and applications, and make their own independent judgments regarding the amount of additional test margin to design into their device or application to compensate for differences between laboratory and real world conditions.

Unless Bourns has explicitly designated an individual Bourns® product as meeting the requirements of a particular industry standard (e.g., ISO/TS 16949) or a particular qualification (e.g., UL listed or recognized), Bourns is not responsible for any failure of an individual Bourns® product to meet the requirements of such industry standard or particular qualification. Users of Bourns® products are responsible for ensuring compliance with safety-related requirements and standards applicable to their devices or applications.

Bourns® products are not recommended, authorized or intended for use in nuclear, lifesaving, life-critical or life-sustaining applications, nor in any other applications where failure or malfunction may result in personal injury, death, or severe property or environmental damage. Unless expressly and specifically approved in writing by two authorized Bourns representatives on a case-by-case basis, use of any Bourns® products in such unauthorized applications might not be safe and thus is at the user’s sole risk. Life-critical applications include devices identified by the U.S. Food and Drug Administration as Class III devices and generally equivalent classifications outside of the United States.

Bourns® custom products shall be negotiated on a case-by-case basis by Bourns and the user for which such Bourns® custom products are specially designed. Absent a written agreement between Bourns and the user regarding the use and level of such testing, the above provisions applicable to Bourns® standard products shall also apply to such Bourns® custom products.

For your convenience, copies of this Legal Disclaimer Notice with German, Spanish, Japanese, Traditional Chinese and Simplified Chinese bilingual versions are available at:

PDF: http://www.bourns.com/docs/Legal/disclaimer.pdf