SPB1007 Series – Power Bead Inductors

Features
- Shielded construction for low radiation
- High rated current
- Low DCR
- RoHS compliant* and halogen free**

**RoHS Compliant, and AEC-Compliant


**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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Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Inductance @ 100 kHz / 0.1 V</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>SPB1007-R12M</td>
<td>115.0</td>
<td>0.28</td>
<td>0.35</td>
<td>61.0</td>
<td>94.0</td>
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<tr>
<td>SPB1007-R15M</td>
<td>150.0</td>
<td>0.28</td>
<td>0.35</td>
<td>61.0</td>
<td>76.0</td>
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<tr>
<td>SPB1007-R17M</td>
<td>175.0</td>
<td>0.28</td>
<td>0.35</td>
<td>61.0</td>
<td>66.0</td>
</tr>
<tr>
<td>SPB1007-R22M</td>
<td>215.0</td>
<td>0.28</td>
<td>0.35</td>
<td>61.0</td>
<td>50.0</td>
</tr>
<tr>
<td>SPB1007-R23M</td>
<td>230.0</td>
<td>0.28</td>
<td>0.35</td>
<td>61.0</td>
<td>48.0</td>
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<tr>
<td>SPB1007-R27M</td>
<td>270.0</td>
<td>0.28</td>
<td>0.35</td>
<td>61.0</td>
<td>40.0</td>
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<tr>
<td>SPB1007-R30M</td>
<td>300.0</td>
<td>0.28</td>
<td>0.35</td>
<td>61.0</td>
<td>35.0</td>
</tr>
</tbody>
</table>

Soldering Profile

- Peak Temperature: 245 °C max.
- Max. Peak Temperature: -5 °C: 30 sec. max.
- Max. Time Above 217 °C: 60~150 sec. max.

Recommended Layout

How to Order

SPB1007 - R12M

Model
Value Code (see table)

Additional Information

Click these links for more information:

- Product Selector
- Technical Library
- Inventory
- Samples
- Contact

General Specifications

- Operating Temperature: -40 °C to +125 °C (Temperature rise included)
- Storage Temperature: -40 °C to +125 °C
- Temperature Rise: 40 °C at rated Irms
- Rated Current: Inductance drops 20 % at Isat
- Moisture Sensitivity Level: 1
- ESD Classification: HBM

Materials

- Core: Ferrite
- Flat Wire: Copper
- Terminal Finish: Ni/Sn
- Packaging: 500 pcs. per 13-inch reel

Product Dimensions

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

<table>
<thead>
<tr>
<th>Dimension (MM or Inches)</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 ± 0.5</td>
<td>1.181 ± 0.020</td>
</tr>
<tr>
<td>21 ± 0.8</td>
<td>0.827 ± 0.031</td>
</tr>
<tr>
<td>13 ± 0.5</td>
<td>0.512 ± 0.020</td>
</tr>
<tr>
<td>16 ± 0.5</td>
<td>0.630 ± 0.020</td>
</tr>
<tr>
<td>200</td>
<td>7.874 ± 0.074</td>
</tr>
<tr>
<td>4</td>
<td>0.157 ± 0.006</td>
</tr>
<tr>
<td>16</td>
<td>0.630 ± 0.020</td>
</tr>
<tr>
<td>400</td>
<td>15.748 ± 0.063</td>
</tr>
</tbody>
</table>

DIMENSIONS: MM (INCHES)

USER DIRECTION OF FEED
QTY: 1,000 PCS PER REEL

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

REV. 10/22
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