SRN3015BTA Series - Semi-shielded Power Inductors

Features
- Semi-shielded construction
- Enhanced product reliability with soldered lead-wire
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

** Additional Information

Click these links for more information:
- PRODUCT SELECTOR
- TECHNICAL LIBRARY
- INVENTORY
- SAMPLES
- CONTACT

Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Inductance @ 100 kHz / 1 V</th>
<th>Q @ 1 MHz</th>
<th>SRF (MHz)</th>
<th>DCR (mΩ)</th>
<th>Ims (A)</th>
<th>Isat (A)</th>
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General Specifications

- Operating Temperature: -55 °C to +125 °C (Temperature rise included)
- Storage Temperature:
  - Component on board: -55 °C to +125 °C
  - In tape and reel package: -10 °C to +40 °C, 50-60 % RH
- Temperature Rise: 40 °C at rated Ims
- Rated Current
- Moisture Sensitivity Level: 1
- ESD Classification (HBM): N/A

Note 1: Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

Materials

- Core: Ferrite
- Wire: Enamelled copper
- Terminal Finish: Ag/Ni/Sn
- Coating: Magnetic resin
- Packaging: 2000 pcs. per 7-inch reel

Recommended Layout

How to Order

Model: SRN3015BTA - R24M
Value Code (see table)
SRN3015BTA Series – Semi-shielded Power Inductors

Soldering Profile

Profile Feature | Pb Free Assembly
---|---
Preheat - Temperature Min. ($T_{smin}$) | 150 °C
- Temperature Max. ($T_{smax}$) | 200 °C
- Time ($t_s$) from $T_{smin}$ to $T_{smax}$ | 60-120 seconds
Ramp-up Rate ($T_L$ to $T_p$) | 3 °C/second max.
Liquidous temperature ($T_L$) | 217 °C
Time ($t_L$) maintained above $T_L$ | 60-150 seconds
Peak package body temperature ($T_p$) | 260 °C
Time within 5 °C of Actual Peak Temperature ($t_p$) | < 30 seconds
Ramp-Down Rate ($T_p$ to $T_L$) | 6 °C/second max.
Time 25 °C to Peak Temperature | 8 minutes max.

REFLOW TIMES: 3 TIMES MAX.

L vs. I Charts

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Users should verify actual device performance in their specific applications.
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Packaging Specifications

USER DIRECTION OF FEED

QTY: 2,000 PCS. PER REEL

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