SRP6030WA Series - Shielded Power Inductors

**Features**
- Shielded construction for low radiation
- Metal alloy powder core for high saturation current
- Wide side terminal for enhanced mechanical strength
- High vibration resistance (15 G typical, 30 G peak)
- High operating temperature
- Low buzz noise
- 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 (L)</th>
<th>Q Typ. @ 100 kHz</th>
<th>SRF (MHz) Typ.</th>
<th>DCR (mJ) Max.</th>
<th>Ims (A) Typ.</th>
<th>Isat (A) Typ.</th>
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**General Specifications**
- **Operating Temperature**: -55 °C to +165 °C (Temperature rise included)
- **Storage Temperature (Component)**: -55 °C to +165 °C
- **Temperature Rise**: 40 °C at rated Ims
- **Rated Current**: Inductance drops 30 % at Isat
- **Moisture Sensitivity Level**: 1
- **ESD Classification (HBM)**: N/A

**Materials**
- Core: Metal alloy powder
- Wire: Enamelled copper
- Terminal Finish: Sn
- Packaging: 1000 pcs. per 13-inch reel

**Soldering Profile**

![Soldering Profile Diagram]

**Profile Feature**
- **Preheat**: - Temperature Min. (Tmin) 150 °C
- **Temperature Max. (Tmax)** 200 °C
- **Time (ts) from Tmin to Tmax** 60-120 seconds

**Pb Free Assembly**
- **Ramp-up Rate** (Tl to Tp) 3 °C/second max.
- **Liquidus temperature (Tl)** 217 °C
- **Time (Tl) maintained above Tl** 60-150 seconds
- **Peak package body temperature (Tp)** 250 °C
- **Time within 5 °C of Actual Peak Temperature (tp)** <30 seconds
- **Ramp-Down Rate** (Tp to Tl) 6 °C/second max.
- **Time 25 °C to Peak Temperature** 8 minutes max.

** 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.

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SRP6030WA Series - Shielded Power Inductors

Electrical Schematic

How to Order
SRP6030WA - R47M
Model
Value Code (see table)

Recommended Layout

Product Dimensions

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