

## **Features**

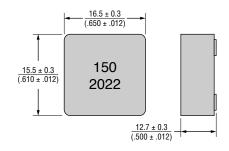
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

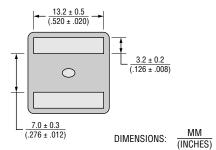
# SRP1513CA Series - Shielded Power Inductors

## Electrical Specifications @ 25 °C

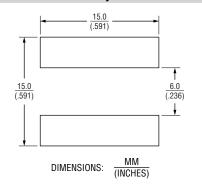
| Bourns<br>Part Number | Inductance<br>@ 100 KHz /<br>0.1 V |             | Q<br>Typ.<br>@     | SRF<br>(MHz) | DCR<br>(mΩ) | DCR<br>(mΩ) | Irms (A)<br>Typ.    |                     | Isat<br>(A) |
|-----------------------|------------------------------------|-------------|--------------------|--------------|-------------|-------------|---------------------|---------------------|-------------|
|                       | L<br>(μH)                          | Tol.<br>(%) | 100 kHz<br>/ 0.1 V | `Typ.´       | Typ.        | Max.        | 20 °C<br>Temp. Rise | 40 °C<br>Temp. Rise | Typ.        |
| SRP1513CA-4R7M        | 4.7                                | 20          | 40                 | 13           | 3.0         | 3.3         | 23                  | 31                  | 44          |
| SRP1513CA-5R6M        | 5.6                                | 20          | 40                 | 11           | 3.5         | 3.9         | 22                  | 29                  | 40          |
| SRP1513CA-6R8M        | 6.8                                | 20          | 40                 | 10           | 3.8         | 4.2         | 21                  | 27                  | 37          |
| SRP1513CA-8R2M        | 8.2                                | 20          | 40                 | 9            | 5.1         | 5.74        | 20                  | 26                  | 33          |
| SRP1513CA-100M        | 10                                 | 20          | 40                 | 8            | 6.3         | 7           | 19                  | 25                  | 30          |
| SRP1513CA-150M        | 15                                 | 20          | 40                 | 7            | 6.8         | 7.5         | 16                  | 22                  | 25.5        |
| SRP1513CA-220M        | 22                                 | 20          | 40                 | 6            | 12.6        | 13.86       | 12                  | 17                  | 22          |
| SRP1513CA-330M        | 33                                 | 20          | 40                 | 5            | 18.5        | 22.2        | 9                   | 14                  | 19          |

## **Product Dimensions**

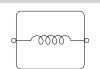




## **Recommended Layout**



### **Electrical Schematic**



## **How to Order**

Value Code (see table)

Model

SRP1513CA - 100M

### **Additional Information**

Click these links for more information:











TECHNICAL INVENTORY SAMPLES

**General Specifications** 

Operating Temperature

.....-55 °C to +155 °C (Temperature rise included) Storage Temperature (Component) .....-55 °C to +155 °C Rated Current ..... Inductance drops 30 % at Isat

Temperature Rise ...... 20 or 40 °C at rated Irms1

Rated Voltage ......40 V Typ. Moisture Sensitivity Level.....1 ESD Classification (HBM).....N/A

<sup>1</sup> 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..... Metal alloy powder Wire .....Enameled copper Terminal Finish ......Sn Packaging...... 100 pcs. per 13-inch reel

Please consult Bourns® Model SRP-A Series Visual Inspection Guide for detailed construction, processing and testing information.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications

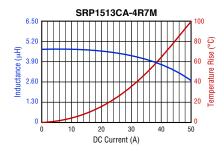
RoHS Directive 2015/863, Mar 31, 2015 and Annex.

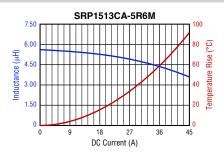
Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (CI) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (CI) content is 1500 ppm or less.

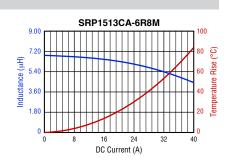
# **SRP1513CA Series - Shielded Power Inductors**

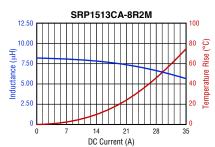
# BOURNS

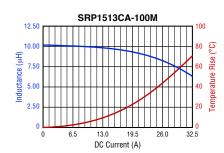


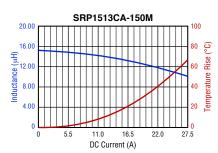


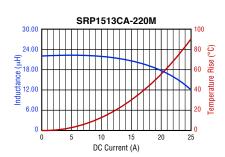


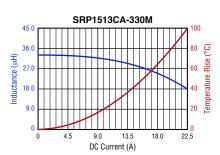




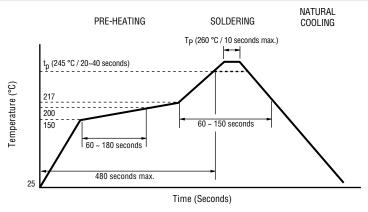






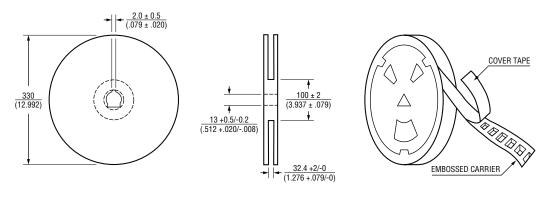


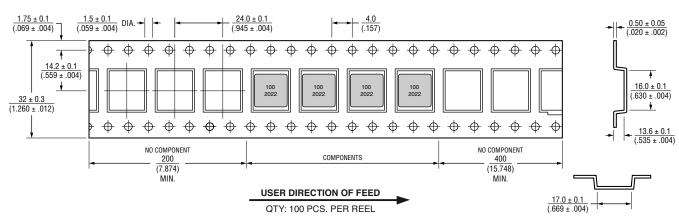
## **Soldering Profile**



REFLOW TIMES: 3 MAX.

## **Packaging Specifications**





DIMENSIONS:  $\frac{MM}{(INCHES)}$ 

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