

## Features

- Shielded construction for low radiation
- Vertical-mount configuration
- Extremely high current
- Low buzz noise
- Inductance range: 90 to 150 nH
- RoHS compliant\* and halogen free\*\*

## Applications

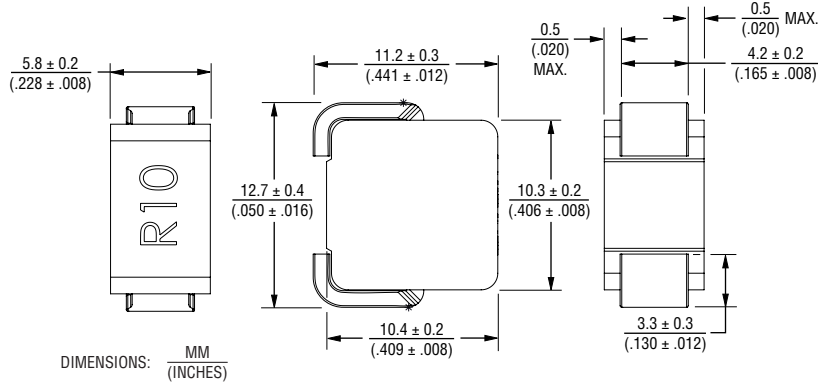
- Servers and workstations
- Data centers
- Data networking and storage systems
- Notebook and desktop computers
- Graphic cards and battery powered systems

## SRP1060VR Series – Shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @100 kHz / 1 V		DCR Typ. ±7 % (mΩ)	Irms Typ. (A)	Isat1 Typ. (A)	Isat2 Typ. (A)
	L (μH)	Tol. (%)				
SRP1060VR-90NM	0.09	20	0.21	90.0	95.0	135.0
SRP1060VR-R10M	0.10	20	0.21	90.0	93.0	133.0
SRP1060VR-R12M	0.12	20	0.21	90.0	91.0	130.0
SRP1060VR-R15M	0.15	20	0.21	90.0	87.0	120.0

### Product Dimensions



### Additional Information

Click these links for more information:



### General Specifications

Operating Temperature ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature ..... -40 °C to +125 °C  
 Temperature Rise ..... 40 °C typ. at rated Irms  
 Rated Current ..... Inductance drops 20 % at Isat1  
 and 30 % at Isat2  
 Moisture Sensitivity Level..... 1  
 ESD Classification (HBM)..... N/A

### Materials

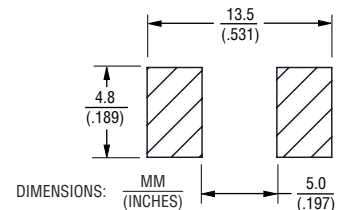
Core..... Metal alloy powder  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn  
 Packaging..... 300 pcs. per reel

### How to Order

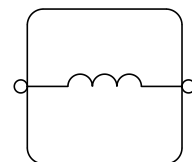
**SRP1060VR - 90NM**

Model \_\_\_\_\_  
 Value Code (see table) \_\_\_\_\_

### Recommended Layout



### Electrical Schematic



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**WARNING**  
**Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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

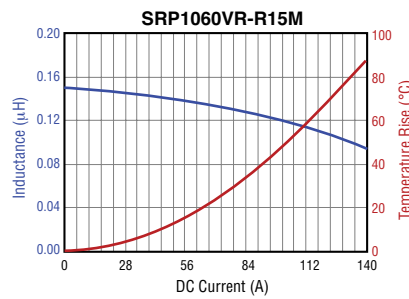
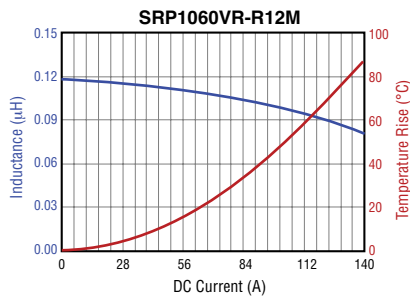
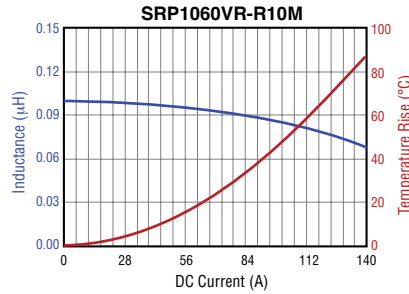
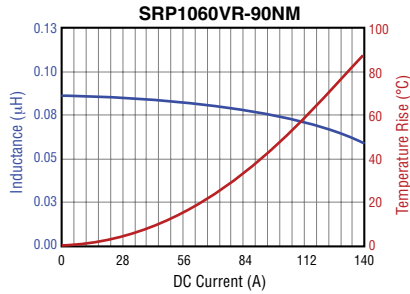
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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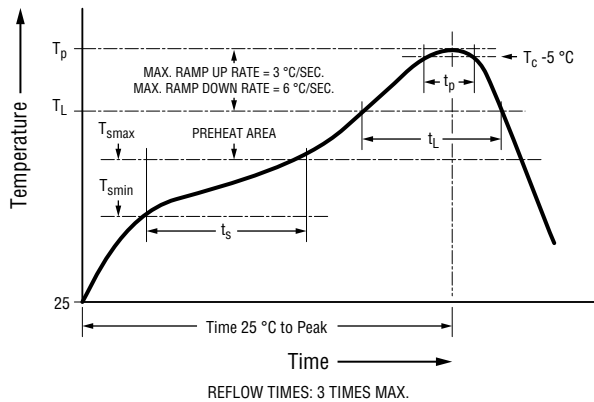
# SRP1060VR Series – Shielded Power Inductors



## Inductance vs. IDC



## 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.
Liquidus temperature ( $T_L$ )	217 °C
Time ( $t_L$ ) maintained above $T_L$	60-150 seconds
Peak package body temperature ( $T_p$ )	245 °C
Time ( $t_p$ ) at $T_c - 5$ °C ( $T_p$ should be equal to or less than $T_c$ )	< 30 seconds
Ramp-Down Rate ( $T_p$ to $T_L$ )	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

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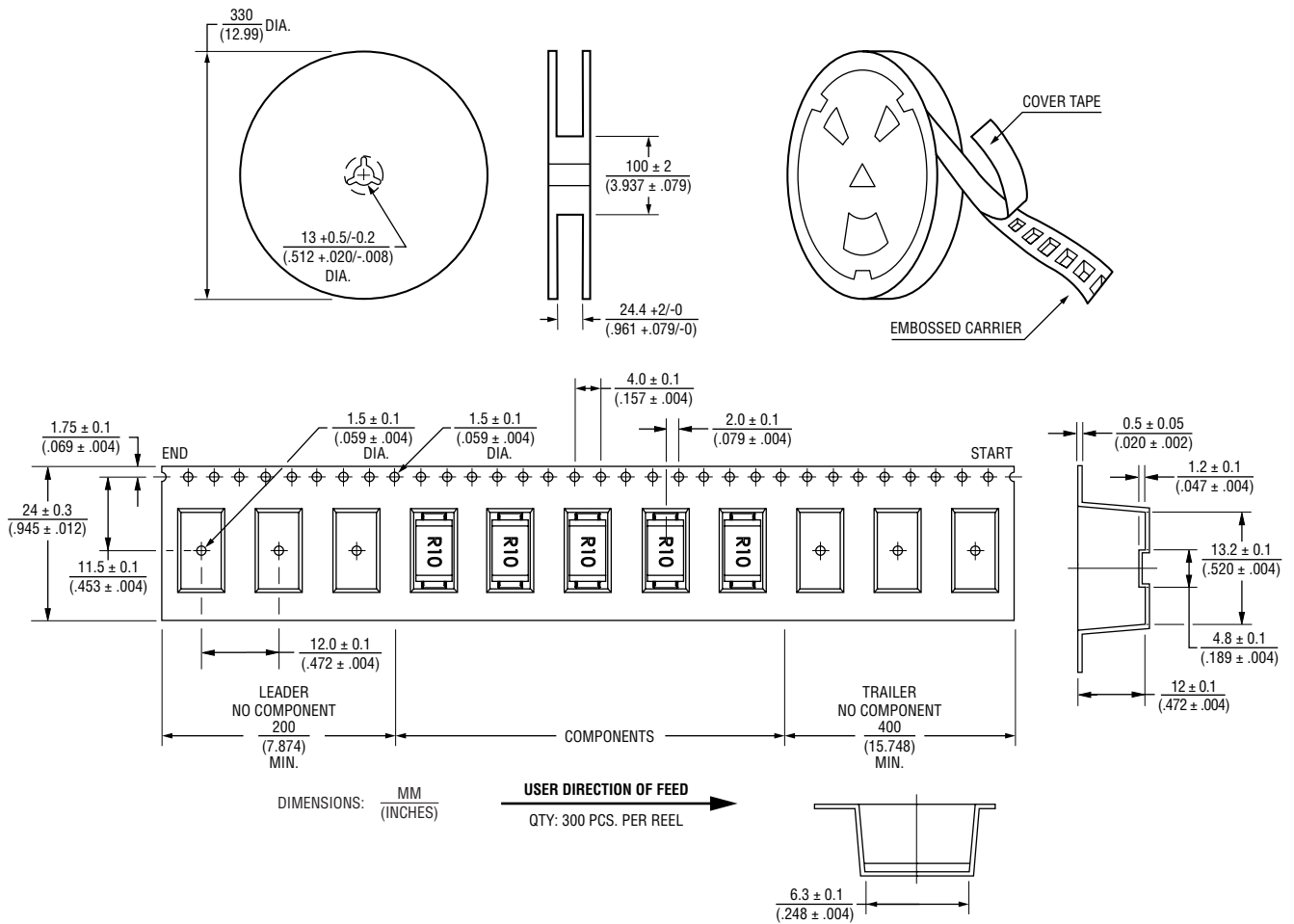
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# SRP1060VR Series – Shielded Power Inductors

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## Packaging Specifications



REV. 04/24

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