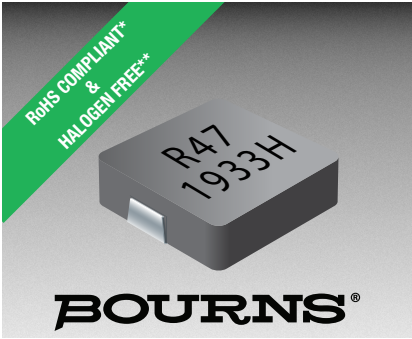




**THE DATASHEET OF  
SRP1265C-R33M**





### Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Inductance range: 0.22 to 33  $\mu$ H
- RoHS compliant\* and halogen free\*\*



This series is currently available but not recommended for new designs.

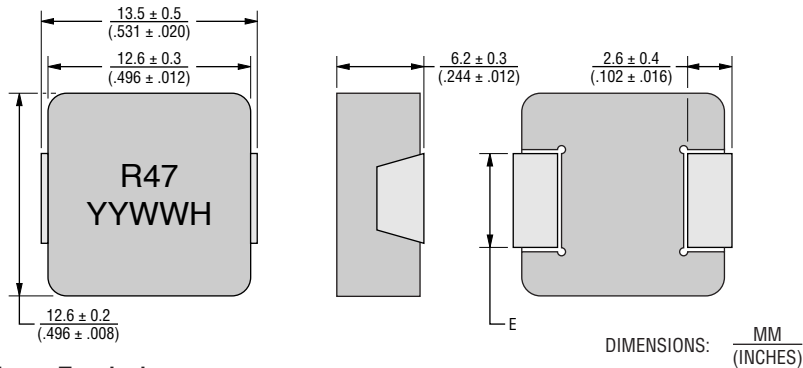
## SRP1265C Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

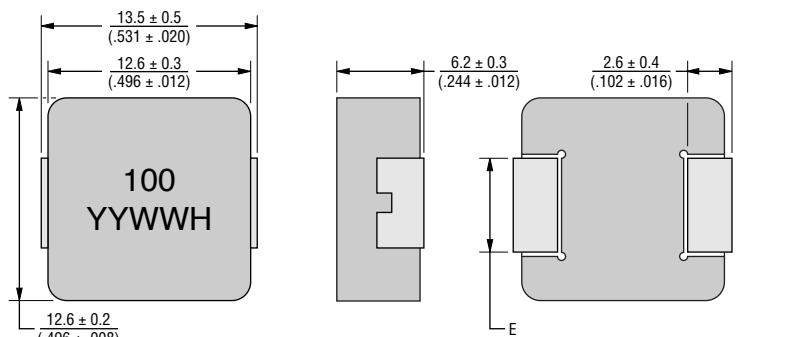
Bourns Part Number	Inductance @ 100 kHz / 1 V		Q (Min.) @100 kHz	SRF (MHz) Typ.	DCR (m $\Omega$ ) Typ.	DCR (m $\Omega$ ) Max.	I <sub>rms</sub> (A) Typ.	I <sub>sat</sub> (A) Typ.	Terminal Type
	L ( $\mu$ H)	Tol. (%)							
SRP1265C-R22M	0.22	20	10	98	0.47	0.6	55	105	non-leadframe
SRP1265C-R33M	0.33	20	10	72	0.65	0.8	50	70	
SRP1265C-R47M	0.47	20	20	62	0.9	1.2	45	66	
SRP1265C-R68M	0.68	20	20	44	1.25	1.5	41	62	
SRP1265C-1R0M	1.0	20	20	37	1.7	2.3	35	54	
SRP1265C-1R5M	1.5	20	20	28	2.3	2.8	31	46	
SRP1265C-2R2M	2.2	20	20	23	4.2	4.8	25	40	leadframe
SRP1265C-3R3M	3.3	20	20	18	5.7	6.8	22	37	
SRP1265C-4R7M	4.7	20	20	15	8.3	9.5	20	31	
SRP1265C-6R8M	6.8	20	20	14	11.5	13.2	15	25	
SRP1265C-8R2M	8.2	20	20	13	13	15.5	13	22	
SRP1265C-100M	10	20	20	12	15.6	18	12	20	
SRP1265C-150M	15	20	20	10	23.2	28	11	13.5	
SRP1265C-220M	22	20	20	7	32.5	37	10	12	
SRP1265C-330M	33	20	20	5	46	56	8	9	

### Product Dimensions

#### Non-Lead Frame Terminal



#### Lead Frame Terminal



E: SRP1265C-1R0M through -1R5M:  $\frac{4.0 \pm 0.3}{(.157 \pm .012)}$

E: SRP1265C-R22M through -R68M and SRP1265C-2R2M through -330M:  $\frac{4.7 \pm 0.3}{(.185 \pm .012)}$

### General Specifications

#### Operating Temperature

.....-40 °C to +125 °C  
(Temperature rise included)

#### Storage Temperature (Component)

..... -40 °C to +125 °C

#### Rated Current

..... Inductance drops 30 % at I<sub>sat</sub>  
Temperature Rise ... 40 °C at rated I<sub>rms</sub><sup>1</sup>  
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 can affect the part temperature. Part temperature should be verified in the end application.

### Materials

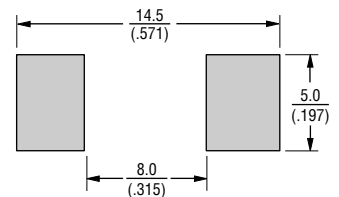
Core..... Metal alloy powder  
Wire ..... Enameled copper  
Terminal Finish ..... Sn  
Packaging..... 500 pcs. per 13-inch reel

### How to Order

#### SRP1265C - 100M

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

### Recommended Layout



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

\* 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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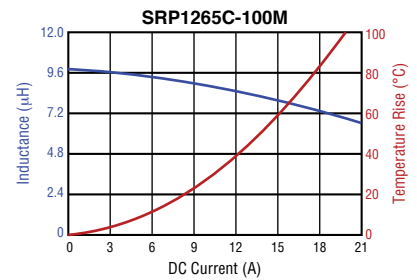
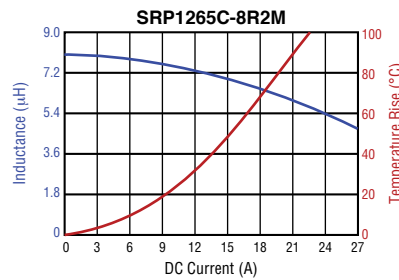
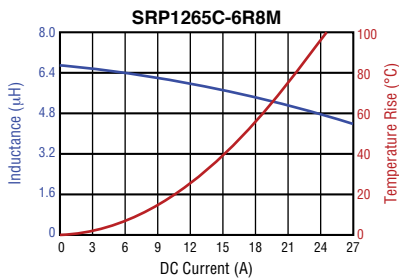
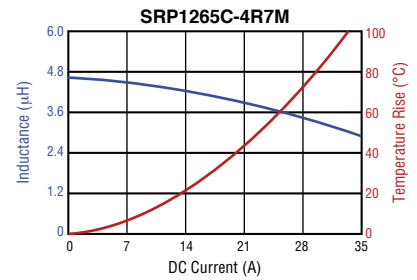
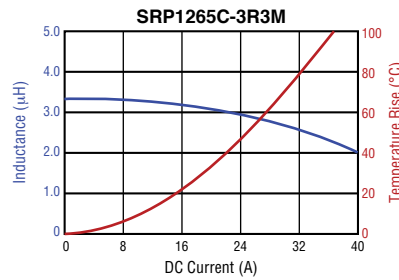
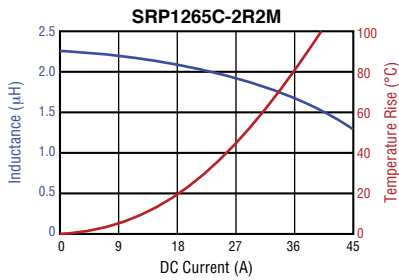
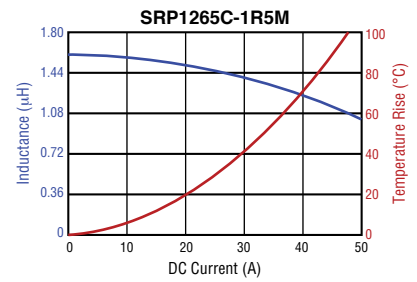
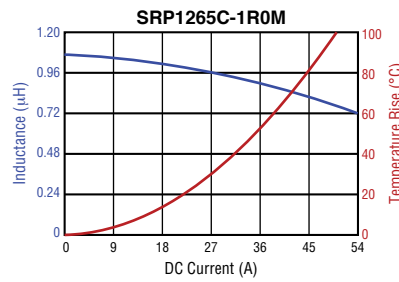
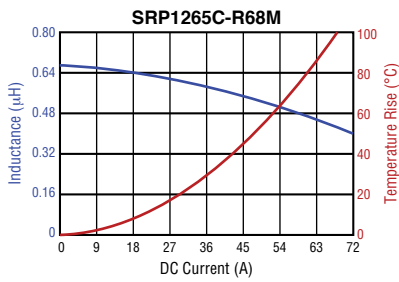
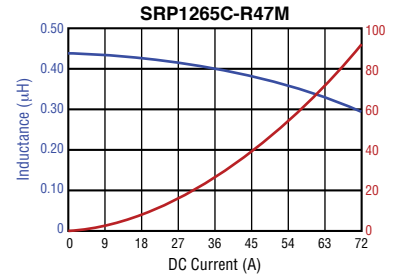
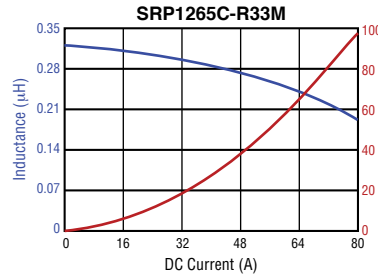
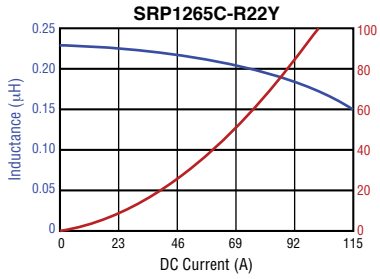


**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

# SRP1265C Series - Shielded Power Inductors



## L vs. I Charts



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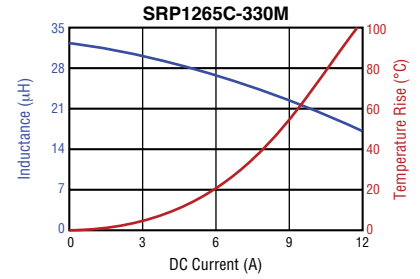
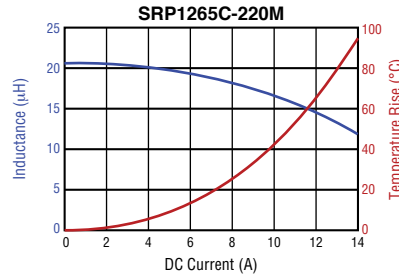
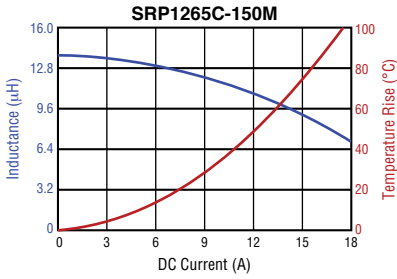
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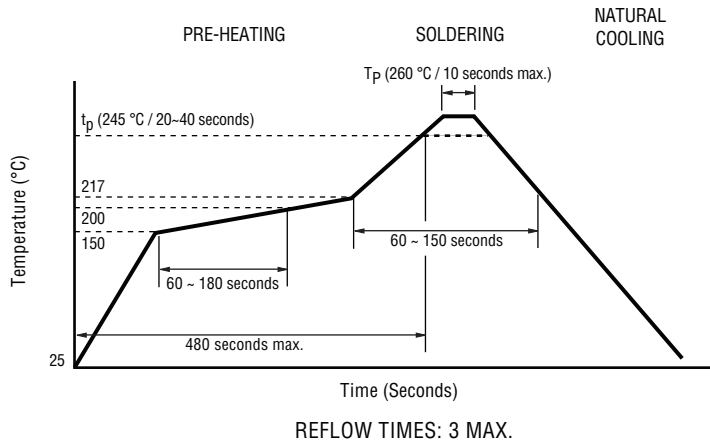
# SRP1265C Series - Shielded Power Inductors



## L vs. I Charts



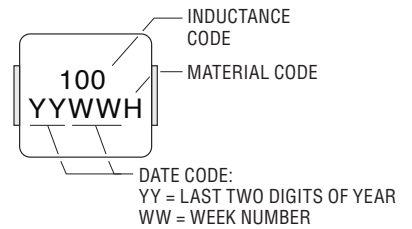
## Soldering Profile



## Electrical Schematic



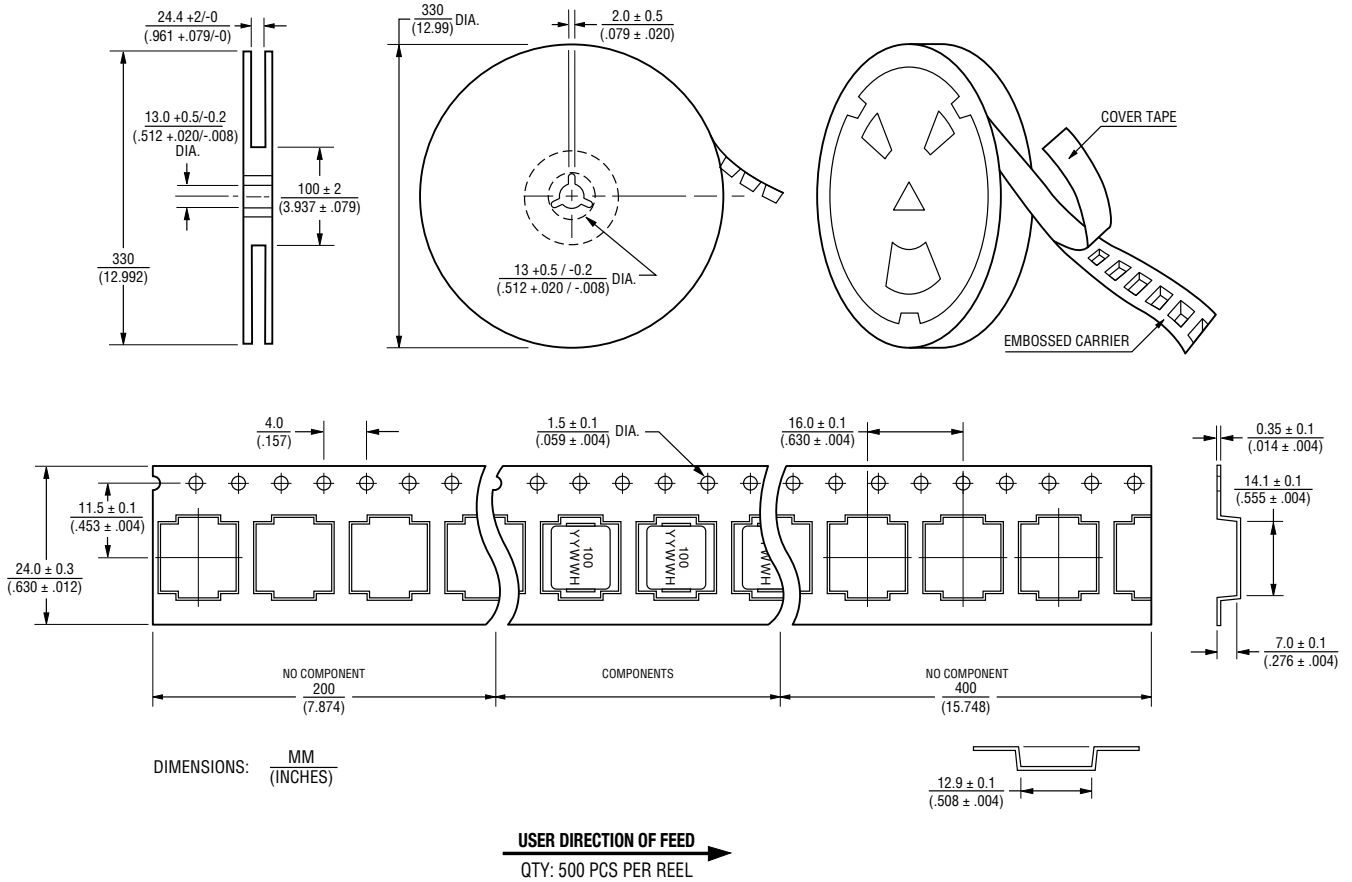
## Typical Part Marking



# SRP1265C Series - Shielded Power Inductors

**BOURNS®**

## Packaging Specifications



**BOURNS®**

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EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

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

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