

## Features

- Shielded construction
- Carbonyl powder core
- High saturation current
- Low radiation
- Low buzz noise
- RoHS compliant\* and halogen free\*\*

## SRP1265CC Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 kHz / 1 V		Q Min.	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	I <sub>rms</sub> (A) Typ.	I <sub>sat</sub> (A) Typ.	Terminal Type
	L (μH)	Tol. %							
SRP1265CC-R22M	0.22	20	10	130	0.47	0.6	55	105	Non-Lead Frame
SRP1265CC-R33M	0.33	20	10	90	0.65	0.8	50	70	
SRP1265CC-R47M	0.47	20	10	75	0.9	1.2	45	66	
SRP1265CC-R68M	0.68	20	15	50	1.25	1.5	41	58	
SRP1265CC-1R0M	1.00	20	20	45	1.7	2.3	35	50	
SRP1265CC-1R5M	1.50	20	20	30	2.3	2.8	31	45	
SRP1265CC-2R2M	2.20	20	20	23	4.2	4.8	25	40	Lead Frame
SRP1265CC-3R3M	3.30	20	20	20	5.7	6.8	22	35	
SRP1265CC-4R7M	4.70	20	20	17	8.3	9.5	20	31	
SRP1265CC-6R8M	6.80	20	20	13	11.5	13.2	15	25	
SRP1265CC-8R2M	8.20	20	20	11	13	15.5	13	22	
SRP1265CC-100M	10.00	20	20	10	15.6	18	12	20	
SRP1265CC-150M	15.00	20	20	7	23.2	28	11	13.5	
SRP1265CC-220M	22.00	20	20	6	32.5	37	10	12	
SRP1265CC-330M	33.00	20	20	5	46	56	8	9	

### Additional Information

Click these links for more information:



### General Specifications

#### Operating Temperature

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

#### Storage Temperature (Component)

..... -40 °C to +125 °C

#### Temperature Rise .....40 °C at rated I<sub>rms</sub><sup>1</sup> Rated Current

..... Inductance drops 30 % at I<sub>sat</sub>

#### 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

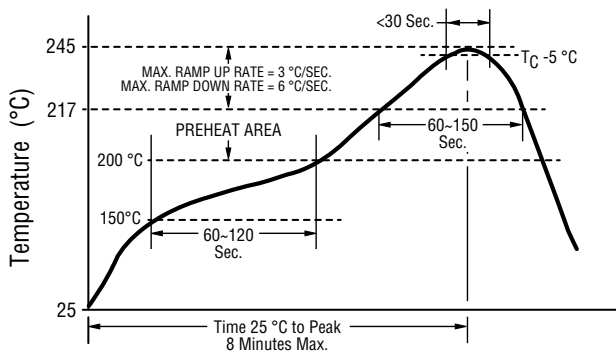
Core.....Carbonyl powder

Wire.....Enameled copper

Terminal Finish..... Sn

Packaging..... 500 pcs. per 13-inch reel

### Soldering Profile



REFLOW TIMES: 3 TIMES MAX.

Profile Feature	Pb Free Assembly
Preheat	
- Temperature Min. (T <sub>smin</sub> )	150 °C
- Temperature Max. (T <sub>smax</sub> )	200 °C
- Time(t <sub>s</sub> ) from T <sub>smin</sub> to T <sub>smax</sub>	60-120 seconds
Ramp-up Rate (T <sub>L</sub> to T <sub>p</sub> )	3 °C/second max.
Liquidous temperature (T <sub>L</sub> )	217 °C
Time (t <sub>L</sub> ) maintained above T <sub>L</sub>	60-150 seconds
Peak package body temperature (T <sub>p</sub> )	245 °C
Time within 5 °C of Actual Peak Temperature (t <sub>p</sub> )	<30 seconds
Ramp-Down Rate (T <sub>p</sub> to T <sub>L</sub> )	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.



### 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.

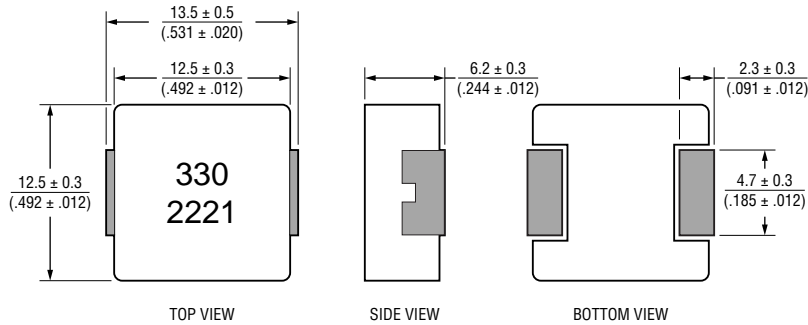
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# SRP1265CC Series - Shielded Power Inductors

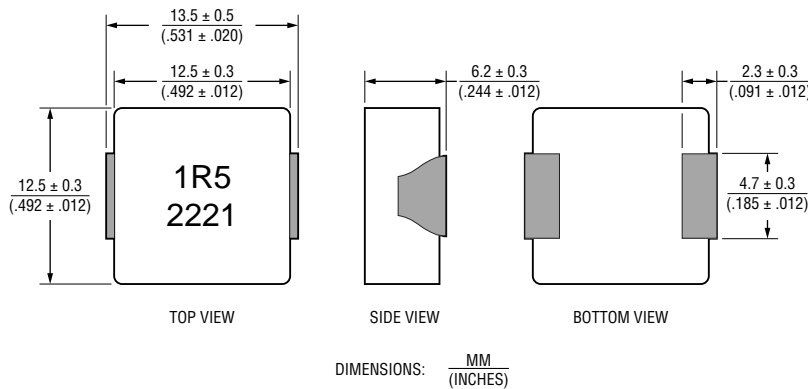
**BOURNS®**

## Product Dimensions

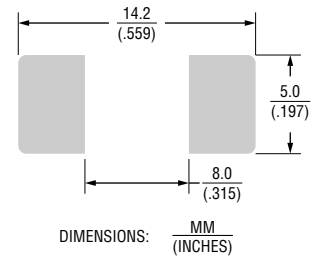
### Lead Frame Terminal



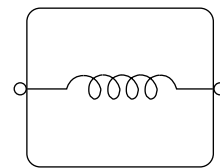
### Non-Lead Frame Terminal



## Recommended Layout



## Electrical Schematic



## How to Order

**SRP1265CC - R22M**

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

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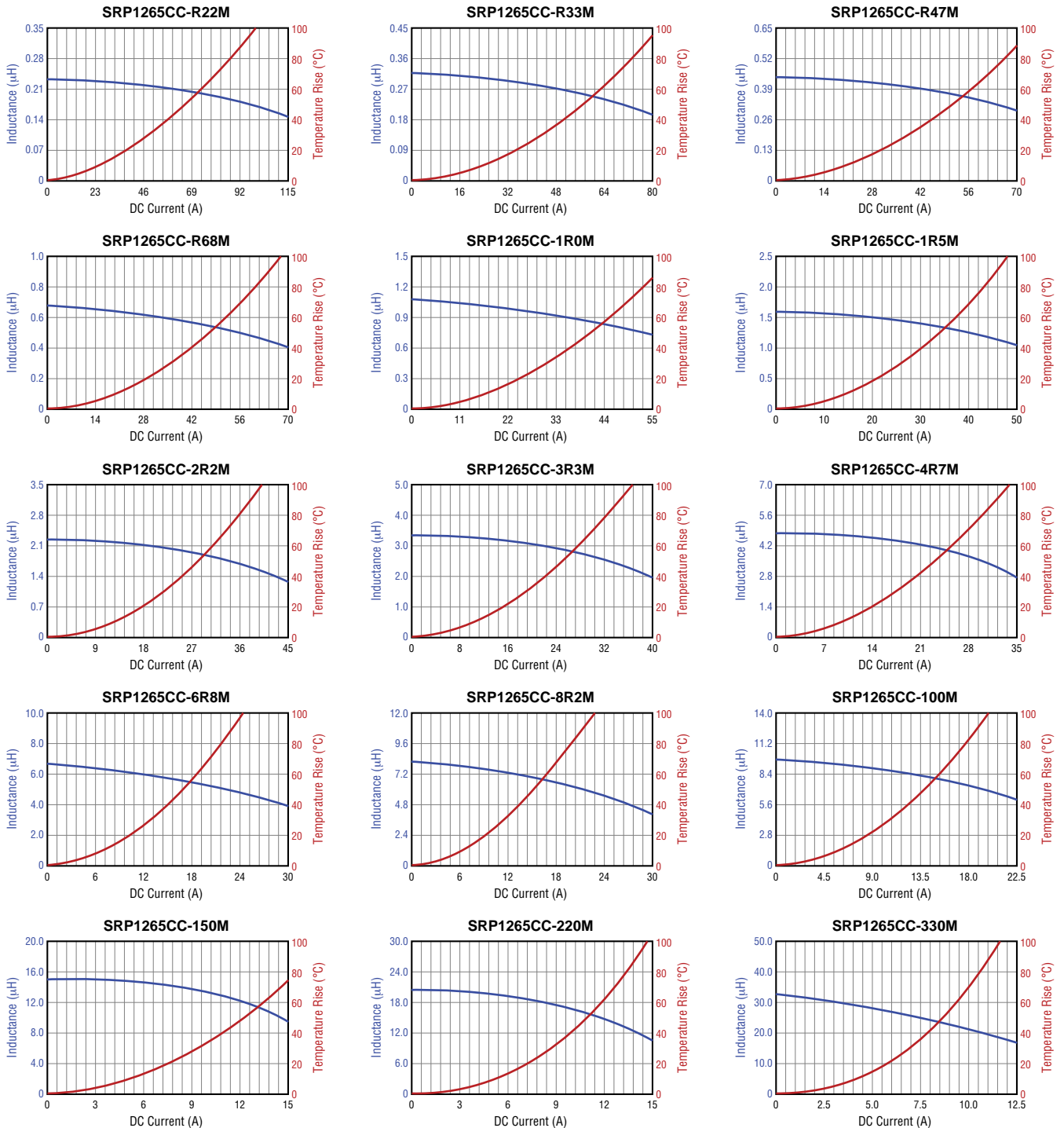
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## L vs. IDC and Temperature vs. IDC Curves

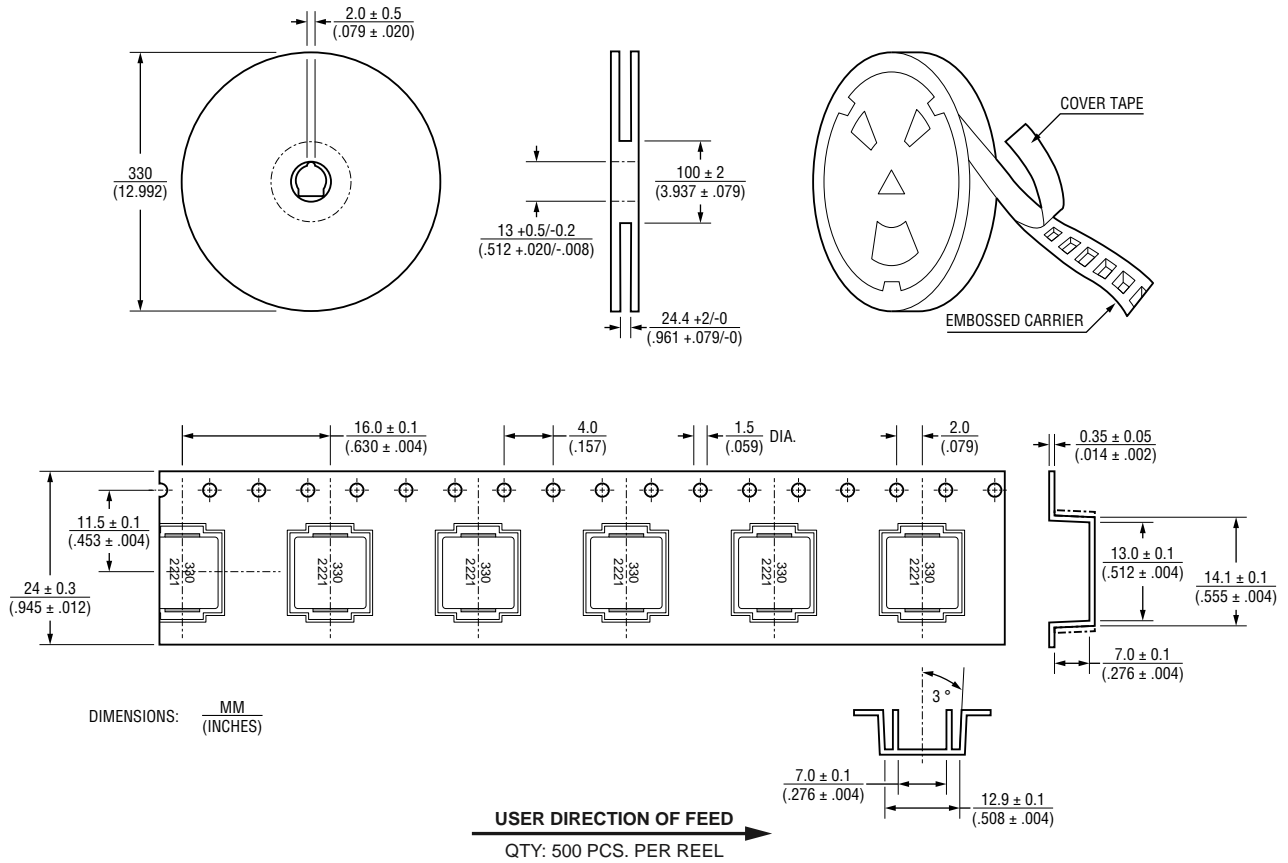


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# SRP1265CC Series - Shielded Power Inductors

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## Packaging Specifications



**BOURNS®**

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The Americas: Tel: +1-951 781-5500 • Email: [americus@bourns.com](mailto:americus@bourns.com)

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