

### Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Inductance range: 0.15 to 22  $\mu$ H
- RoHS compliant\* and halogen free\*\*

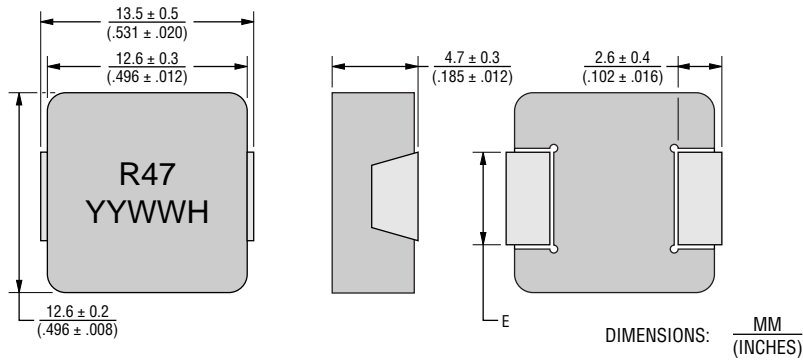
## SRP1245C Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

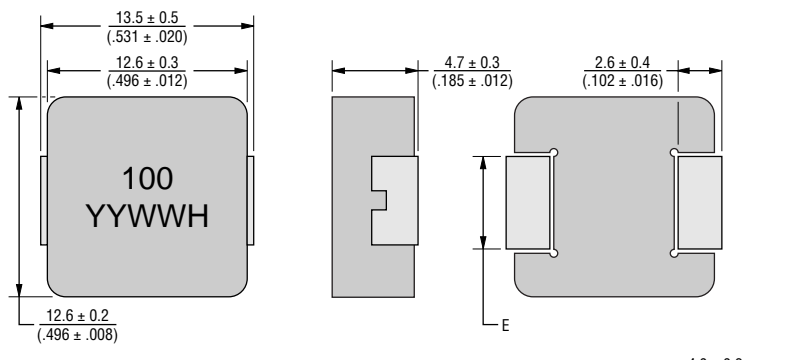
Bourns Part Number	Inductance @ 100 kHz / 1 V		Q (Min.) @100 kHz	SRF (MHz) Typ.	DCR (m $\Omega$ ) Typ.	DCR (m $\Omega$ ) Max.	I <sub>rms</sub> (A) Typ.	Isat (A) Typ.	Terminal Type
	L ( $\mu$ H)	Tol. (%)							
SRP1245C-R15Y	0.15	30	15	147	0.36	0.41	55	100	non-leadframe
SRP1245C-R22M	0.22	20	15	120	0.5	0.55	48	95	
SRP1245C-R36M	0.36	20	20	100	0.75	0.83	41	80	
SRP1245C-R47M	0.47	20	20	70	0.96	1.15	38	65	
SRP1245C-R68M	0.68	20	20	58	1.4	1.6	32	54	
SRP1245C-1R0M	1.0	20	20	42	2	2.4	30	50	
SRP1245C-1R5M	1.5	20	20	32	3	3.5	27	48	leadframe
SRP1245C-2R2M	2.2	20	20	27	4.3	5	25	40	
SRP1245C-3R3M	3.3	20	20	25	7.3	8.4	20	32	
SRP1245C-4R7M	4.7	20	20	20	11.4	15	14	27	
SRP1245C-6R8M	6.8	20	20	16	14.5	16.7	12	23	
SRP1245C-8R2M	8.2	20	20	13	18.6	21.5	11.5	20	
SRP1245C-100M	10	20	20	10	21.4	25.5	11	17	
SRP1245C-150M	15	20	20	8	32.6	38	9	13	
SRP1245C-220M	22	20	20	6	50	58	7.5	11	

### Product Dimensions

#### Non-Lead Frame Terminal



#### Lead Frame Terminal



E: SRP1245C-R47M through -R68M:  $\frac{4.0 \pm 0.3}{(.157 \pm .012)}$

E: SRP1245C-R15Y through -R36M and SRP1245C-1R0M through -2R2M:  $\frac{4.7 \pm 0.3}{(.185 \pm .012)}$

### General Specifications

Operating Temperature .....-40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature .. -40 °C to +125 °C  
 Rated Current ..... Inductance drops 30 % at Isat  
 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

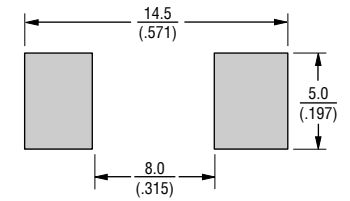
Core ..... Metal alloy powder  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn  
 Packaging..... 500 pcs. per 13-inch reel

### How to Order

#### SRP1245C - 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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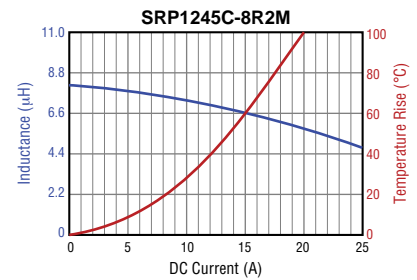
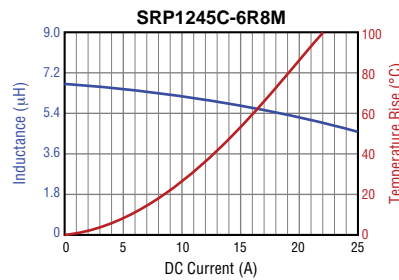
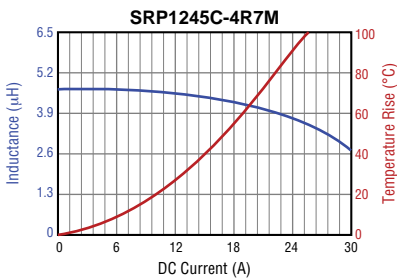
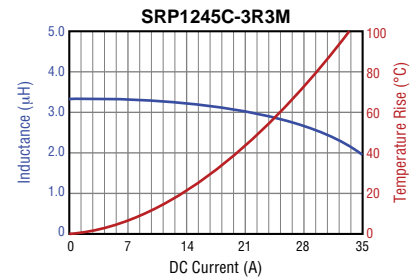
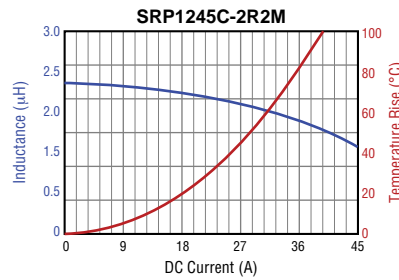
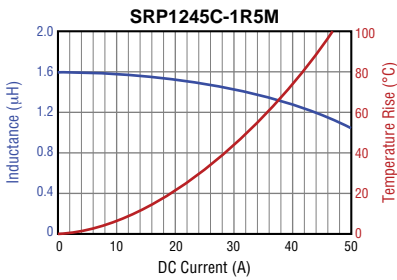
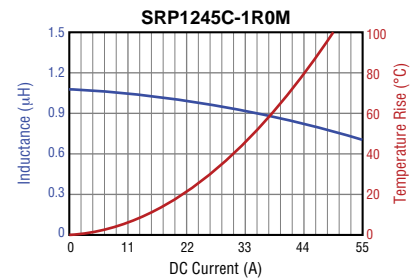
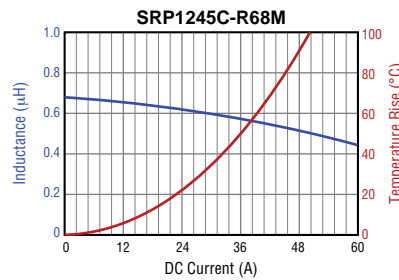
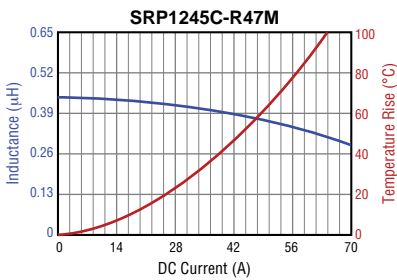
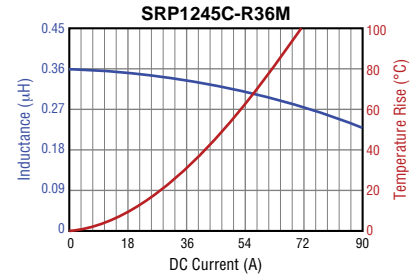
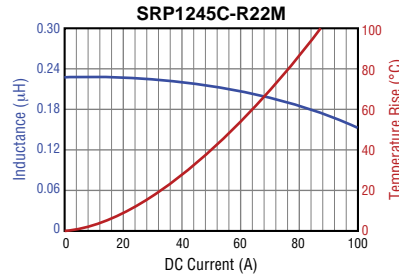
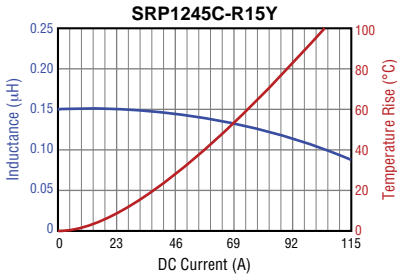


**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

# SRP1245C Series - Shielded Power Inductors



## L vs. I Charts



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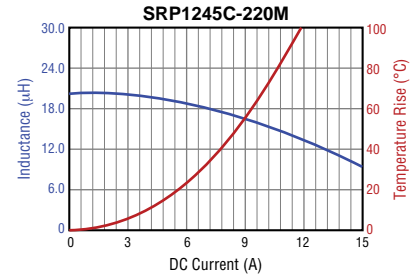
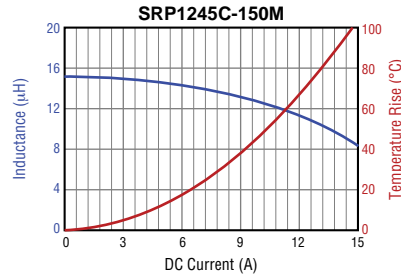
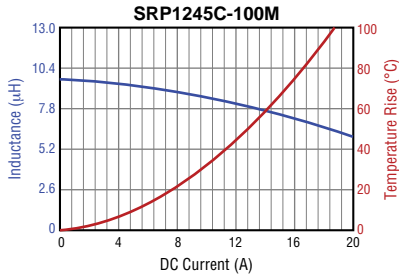
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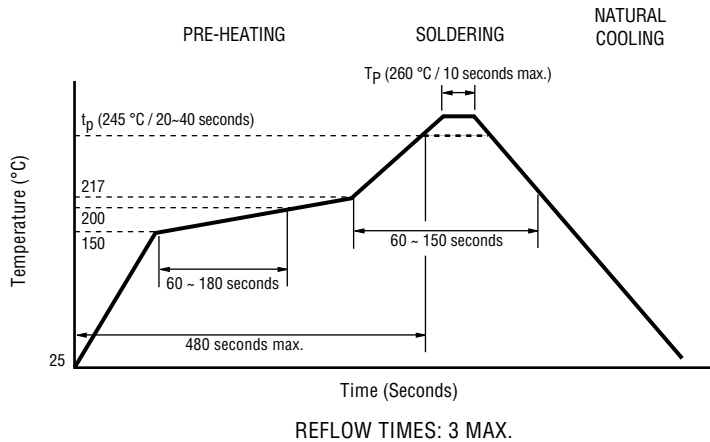
# SRP1245C Series - Shielded Power Inductors



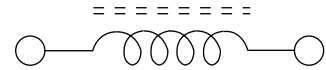
## L vs. I Charts



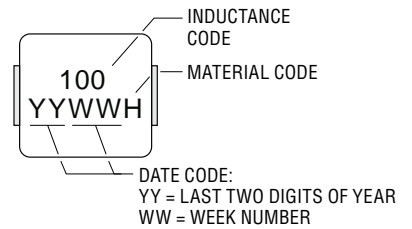
## Soldering Profile



## Electrical Schematic



## Typical Part Marking





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