

## 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\*\*

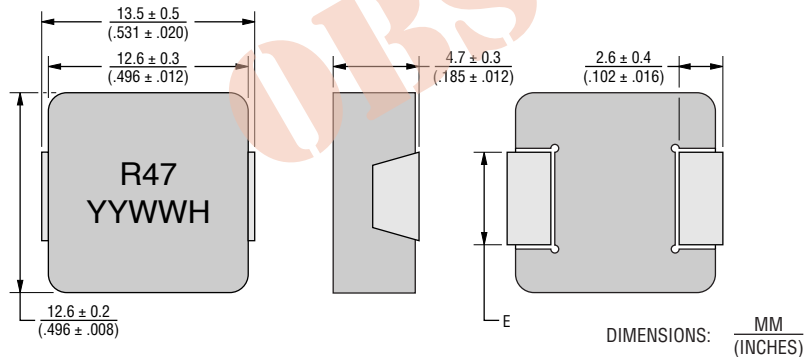
## SRP1245C Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

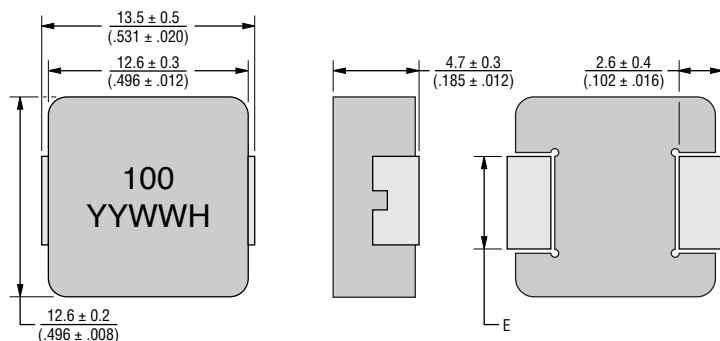
Bourns Part Number	Inductance @ 100 kHz / 1 V		Q (Min.) @100 kHz	SRF (MHz) Typ.	DCR (m $\Omega$ ) Typ.	DCR (m $\Omega$ ) Max.	Irms (A) Typ.	Isat (A) Typ.	Terminal Type
	L ( $\mu$ H)	Tol. (%)							
SRP1245C-R15Y	0.15	30	15	147	0.36	0.41	55	100	non-leadframe
SRP1245C-R22M	0.22	20	15	120	0.5	0.55	48	95	
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	leadframe
SRP1245C-1R5M	1.5	20	20	32	3	3.5	27	48	
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:	$4.0 \pm 0.3$ (.157 ± .012)
E:	All other part numbers:	$4.7 \pm 0.3$ (.185 ± .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 Irms<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

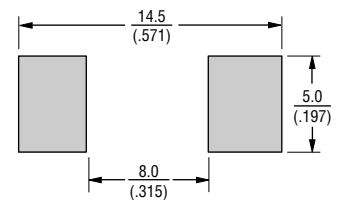
Core..... Metal alloy powder  
Wire..... Enameled copper  
Terminal Finish ..... Sn  
Packaging..... 500 pcs. per 13-inch reel

### 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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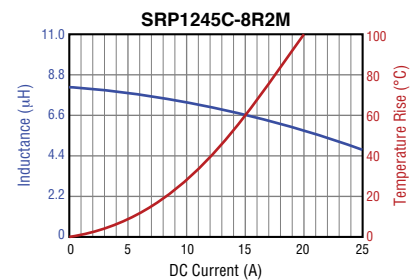
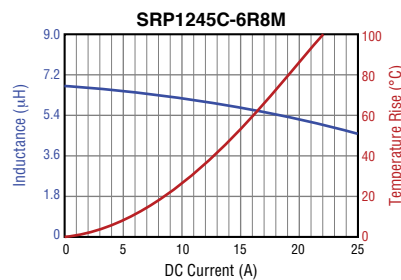
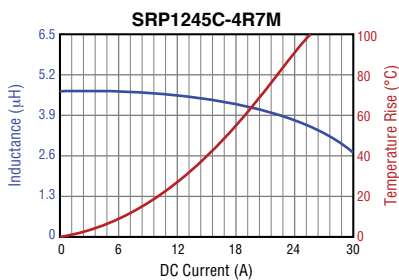
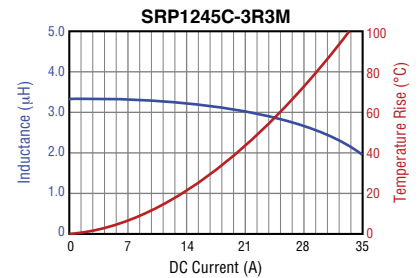
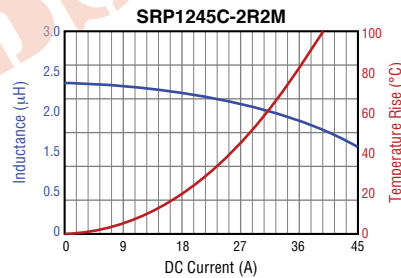
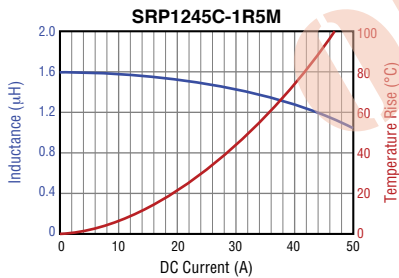
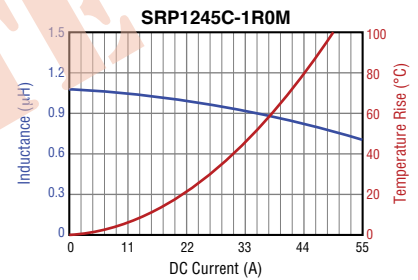
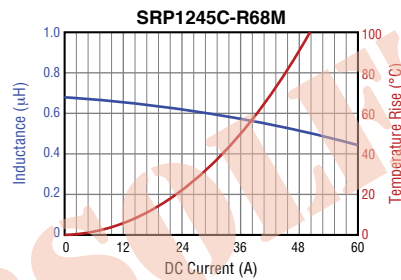
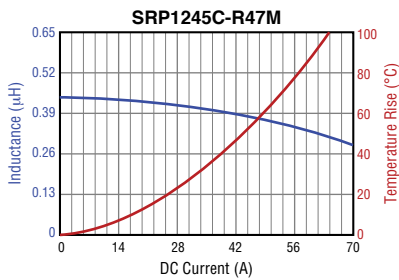
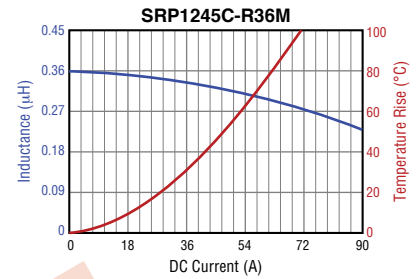
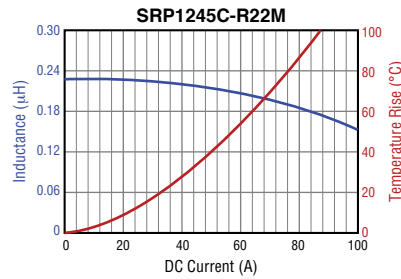
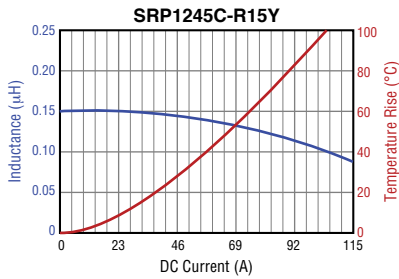


**WARNING** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## SRP1245C Series - Shielded Power Inductors

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### L vs. I Charts



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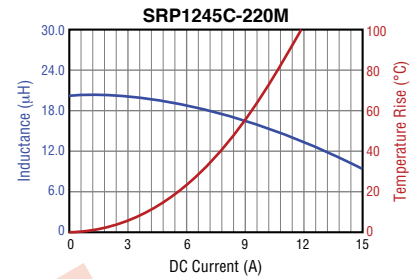
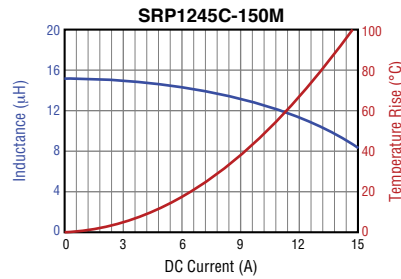
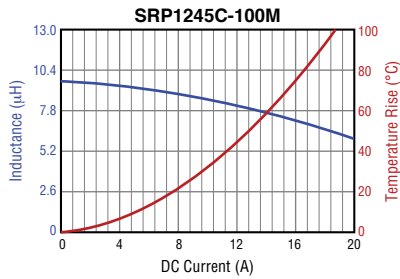
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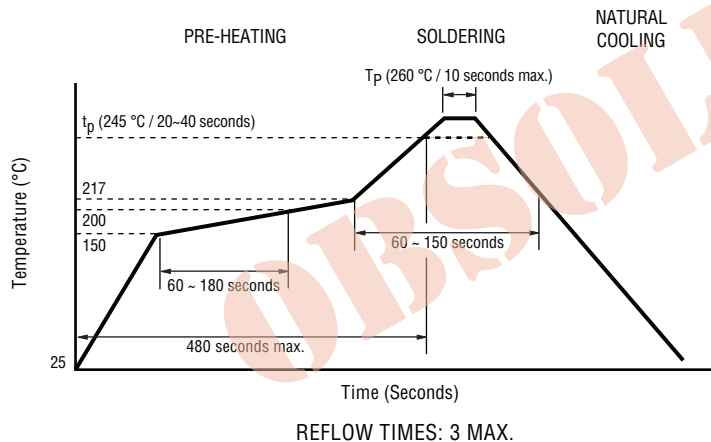
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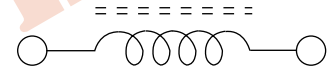
### L vs. I Charts



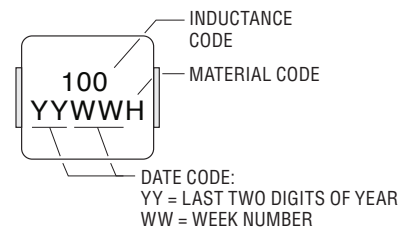
### Soldering Profile



### Electrical Schematic



### Typical Part Marking



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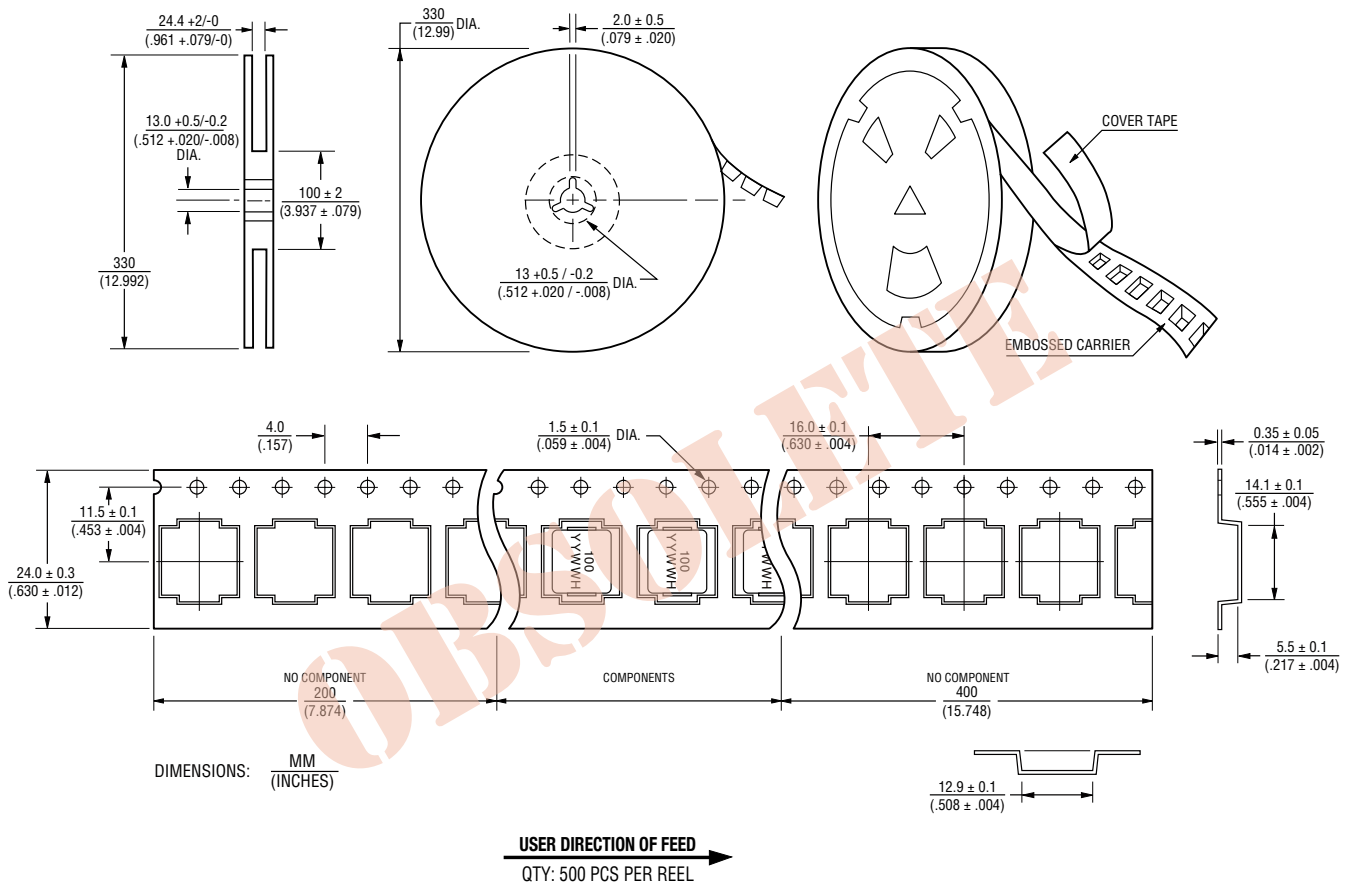
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# SRP1245C Series - Shielded Power Inductors

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## Packaging Specifications



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