

## **Features**

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



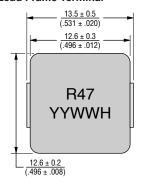
# SRP1245C Series - Shielded Power Inductors

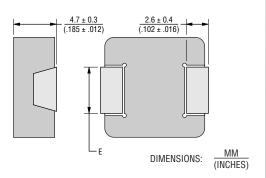
## Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz /1 V		Q (Min.)	SRF (MHz)	DCR (mΩ)	DCR (mΩ)	Irms (A)	Isat (A)	Terminal
	L (μH)	Tol. (%)	@100 kHz	Typ.	Typ.	Max.	Typ.	Typ.	Туре
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	

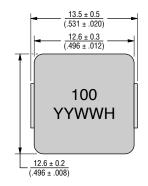
## **Product Dimensions**

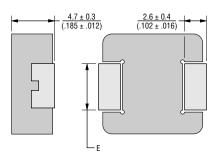
## Non-Lead Frame Terminal





## **Lead Frame Terminal**





E: SRP1245C-R47M through -R68M:  $\frac{4.0 \pm 0.0}{(.157 \pm .0)}$ E: All other part numbers:  $\frac{4.7 \pm 0.0}{(.157 \pm .0)}$ 

 $\textbf{WARNING} \ \ \textbf{Cancer and Reproductive Harm -} \ \underline{www.P65Warnings.ca.gov}$ 

## **General Specifications**

Operating Temperature

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

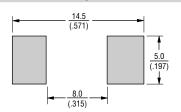
1 Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all can affect the part temperature. Part temperature should be verified in the end application.

### Materials

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

## **How to Order**

## **Recommended Layout**



Please consult <u>Bourns® Model SRP-A</u>
<u>Series Visual Inspection Guide</u> for detailed construction, processing and testing information.

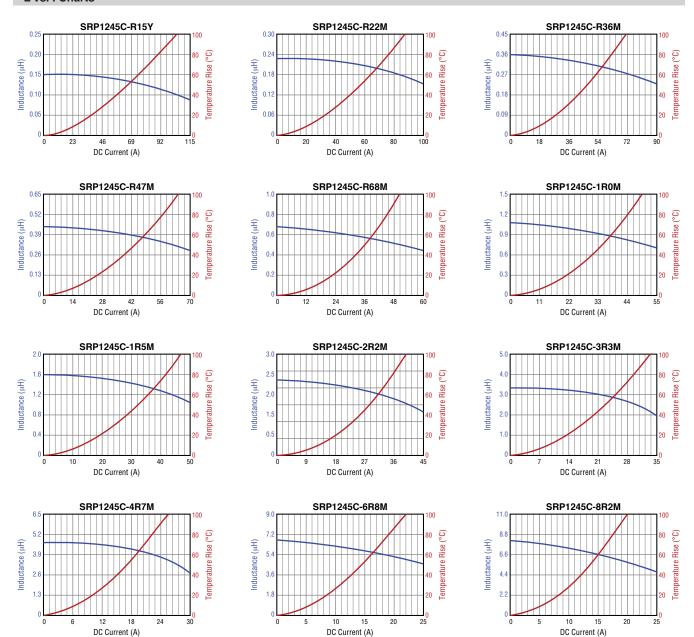
- $^{\star}$  RoHS Directive 2015/863, Mar 31, 2015 and Annex.
- \* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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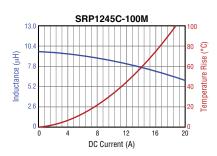
# **BOURNS**®

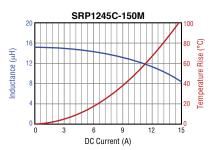
## L vs. I Charts

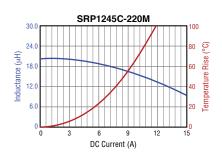


# SRP1245C Series - Shielded Power Inductors

## L vs. I Charts

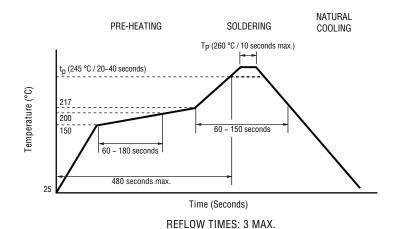




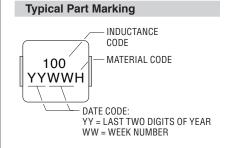


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## **Soldering Profile**



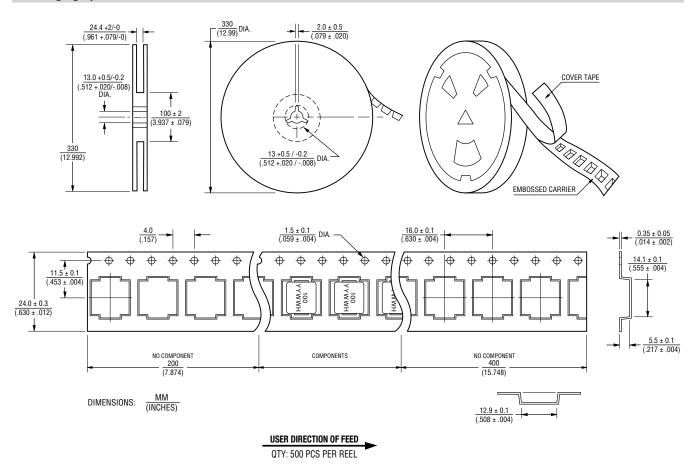
**Electrical Schematic** 



# **SRP1245C Series - Shielded Power Inductors**

# **BOURNS**®

## **Packaging Specifications**



# **BOURNS**®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

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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## REV. 05/22

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