



**THE DATASHEET OF  
SRP6030VA-1R0M**





### Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- High temperature 180 °C
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## SRP6030VA Series – Shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz / 0.1 V		Q Min. @ 100 kHz	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	I rms (A) Typ.	I sat (A) Typ.
	L (μH)	Tol. %						
SRP6030VA-R47M	0.47	± 20 %	10	65	3.5	4.0	20	21
SRP6030VA-R56M	0.56	± 20 %	10	56	4.2	4.8	19	20
SRP6030VA-R68M	0.68	± 20 %	10	50	4.8	5.6	17	19
SRP6030VA-R82M	0.82	± 20 %	10	46	5.7	6.8	16	18
SRP6030VA-1R0M	1.0	± 20 %	10	43	6.6	8.0	15	16
SRP6030VA-1R5M	1.5	± 20 %	10	32	11.2	13.2	13	14
SRP6030VA-2R2M	2.2	± 20 %	10	29	21.5	25.8	11	13
SRP6030VA-3R3M	3.3	± 20 %	10	22	32.0	37.0	9.0	9.5
SRP6030VA-4R7M	4.7	± 20 %	10	18	36.0	42.0	7.0	8.5
SRP6030VA-5R6M	5.6	± 20 %	10	17	36.0	42.0	6.5	7.2
SRP6030VA-6R8M	6.8	± 20 %	10	15	43.0	50.0	6.0	6.5
SRP6030VA-100M	10	± 20 %	10	12	62.0	68.0	5.0	5.0
SRP6030VA-150M	15	± 20 %	10	10	95.0	114.0	4.1	3.2
SRP6030VA-220M	22	± 20 %	10	9	140.0	168.0	3.4	3.0

### General Specifications

Operating Temperature .....-55 °C to +180 °C  
 (Temperature rise included)  
 Storage Temperature (Component) .....-55 °C to +180 °C  
 Rated Current ..... Inductance drops 30 % at Isat  
 Temperature Rise ... 40 °C at rated Irms  
 MSL ..... 1  
 ESD Classification (HBM)..... N/A

Note 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.

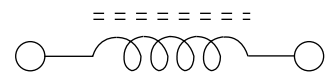
### Materials

Core..... Metal alloy powder  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn/Ni  
 Packaging..... 1000 pcs. per 13-inch reel

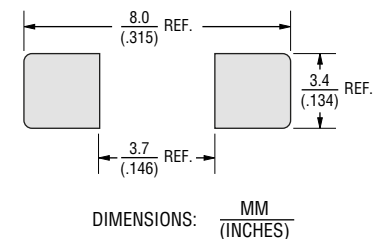
### How to Order

SRP6030VA - 100M  
 Model \_\_\_\_\_  
 Value Code (see table) \_\_\_\_\_

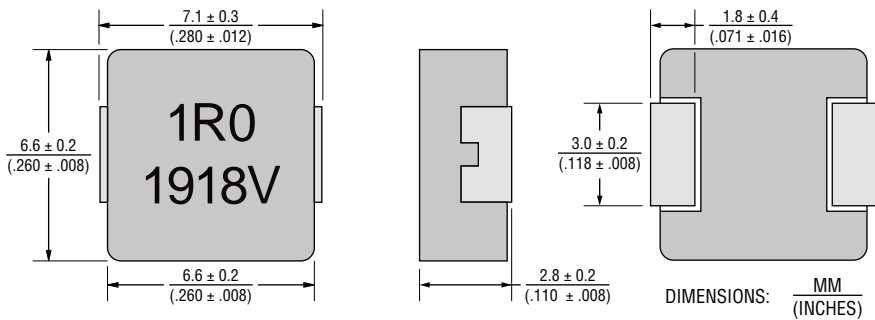
### Schematic



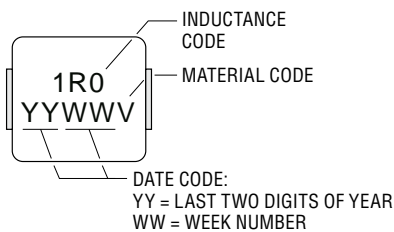
### Recommended Layout



### Product Dimensions



### Typical Part Marking

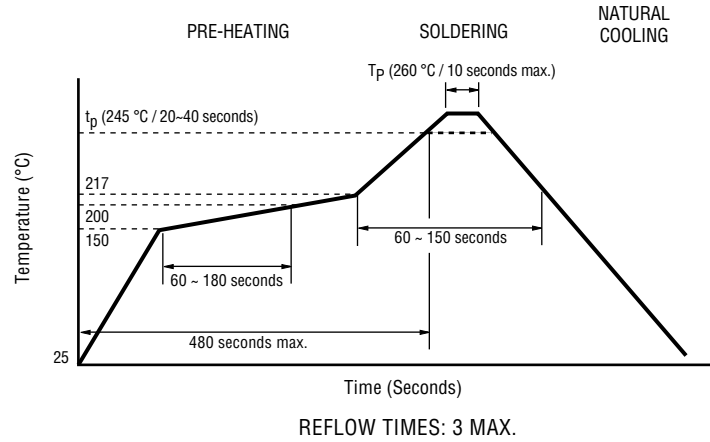


\* RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
 \*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.  
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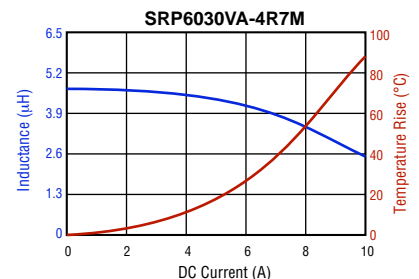
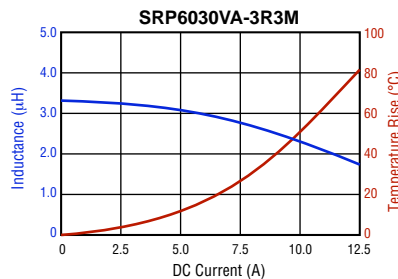
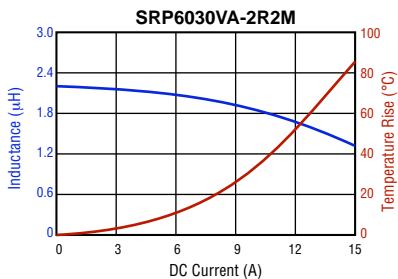
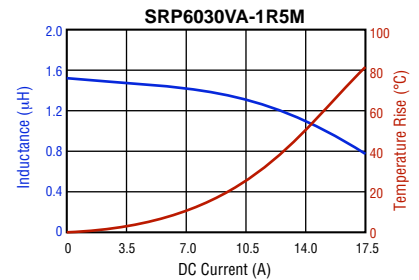
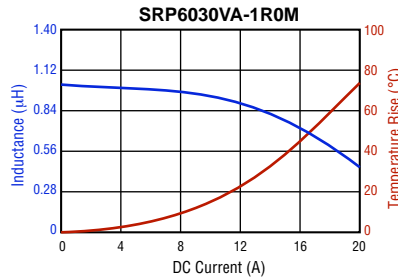
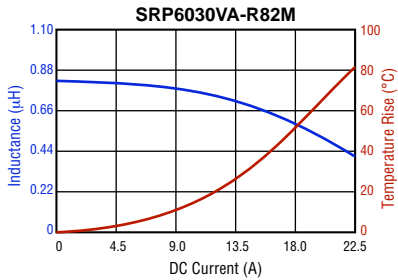
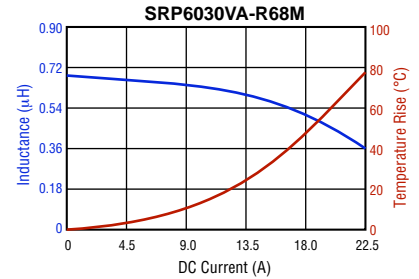
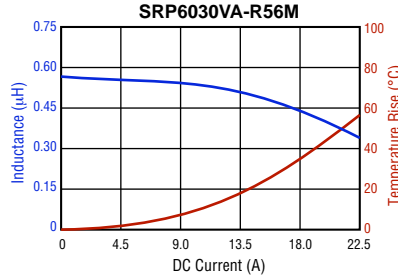
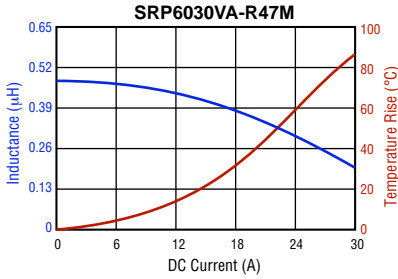
# SRP6030VA Series – Shielded Power Inductors



## Soldering Profile



## L vs. I Charts



Specifications are subject to change without notice.

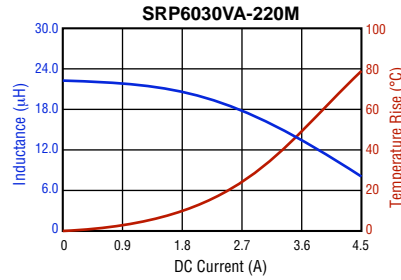
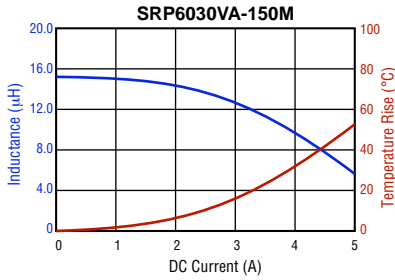
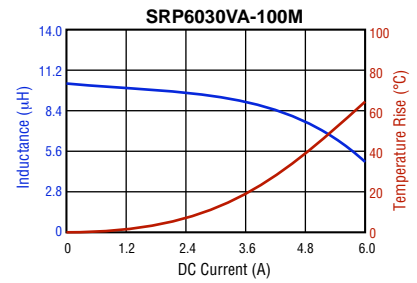
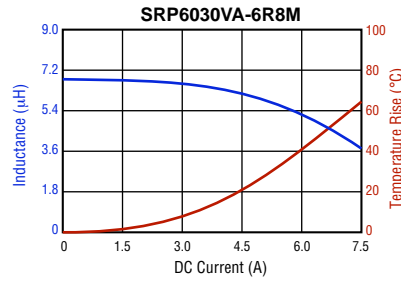
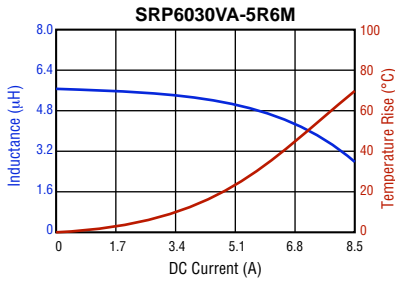
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## L vs. I Charts (Continued)



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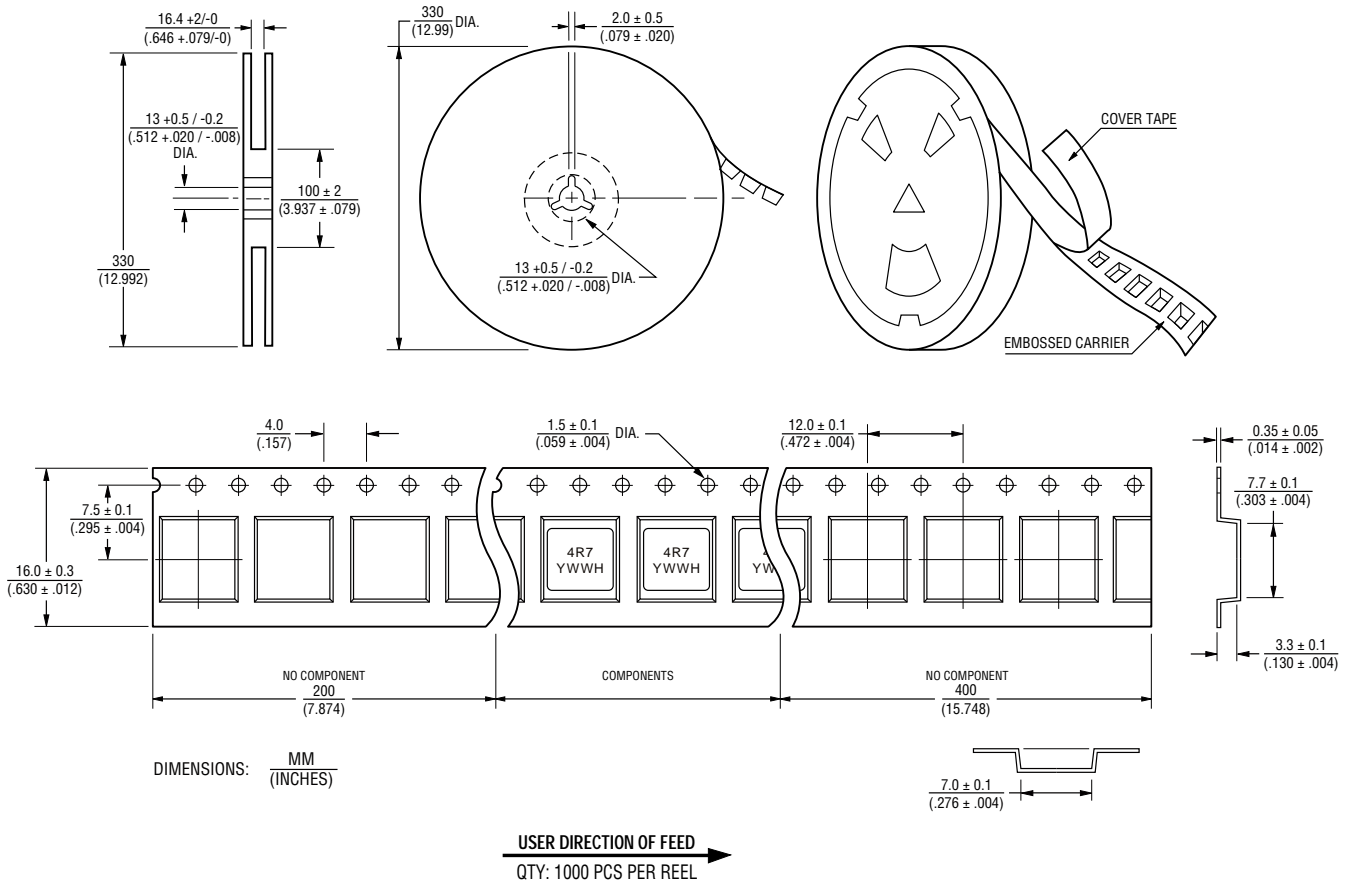
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# SRP6030VA Series – Shielded Power Inductors

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## 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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