



**THE DATASHEET OF  
SRP3012C-2R2M**





### Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Inductance range 0.15 to 10  $\mu$ H
- RoHS compliant\* and halogen free\*\*



This series is currently available but not recommended for new designs.

## SRP3012C 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 rms (A) Typ.	I sat (A) Typ.	Marking
	L ( $\mu$ H)	Tol. %							
SRP3012C-R15Y	0.15	$\pm 30\%$	10	180	9.6	11	10	14	.15H
SRP3012C-R22M	0.22	$\pm 20\%$	10	140	14	17	8	12	.22H
SRP3012C-R33M	0.33	$\pm 20\%$	10	115	16	20	7	9.8	.33H
SRP3012C-R47M	0.47	$\pm 20\%$	10	98	25	30	5	6.5	.47H
SRP3012C-R68M	0.68	$\pm 20\%$	10	75	34	40	4.5	5.8	.68H
SRP3012C-1R0M	1.0	$\pm 20\%$	10	50	50	60	3.3	5.2	1.0H
SRP3012C-1R5M	1.5	$\pm 20\%$	10	42	71	85	3	4	1.5H
SRP3012C-2R2M	2.2	$\pm 20\%$	10	38	98	115	2.7	3.2	2.2H
SRP3012C-3R3M	3.3	$\pm 20\%$	10	34	172	198	2	2.6	3.3H
SRP3012C-4R7M	4.7	$\pm 20\%$	10	31	245	282	1.6	2.3	4.7H
SRP3012C-5R6M	5.6	$\pm 20\%$	10	27	310	360	1.5	2	5.6H
SRP3012C-6R8M	6.8	$\pm 20\%$	10	26	360	400	1.4	1.8	6.8H
SRP3012C-8R2M	8.2	$\pm 20\%$	10	25	420	463	1.2	1.5	8.2H
SRP3012C-100M	10	$\pm 20\%$	10	24	450	520	1.1	1.4	10H

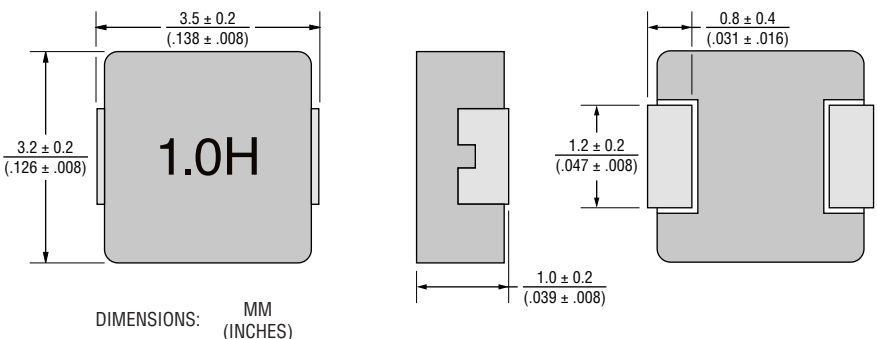
### General Specifications

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

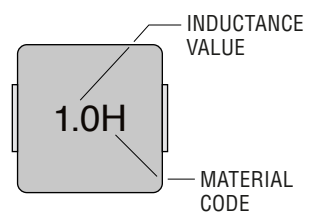
### Materials

Core ..... Metal alloy powder  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn  
 Packaging ..... 4000 pcs. per 13-inch reel

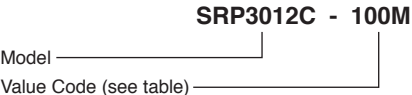
### Product Dimensions



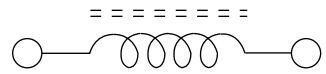
### Typical Part Marking



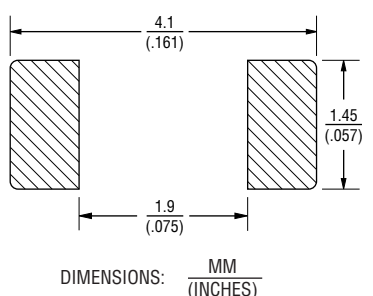
### How to Order



### Schematic



### Recommended Layout



\* 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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 Users should verify actual device performance in their specific applications.  
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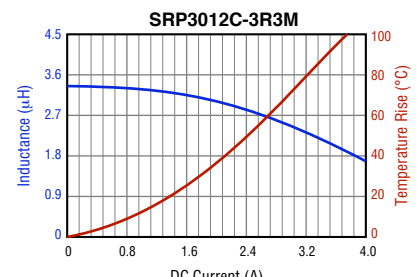
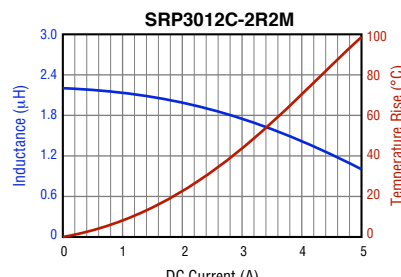
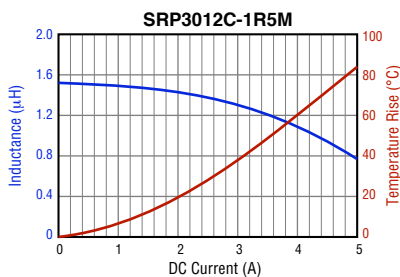
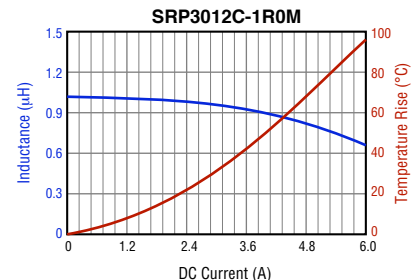
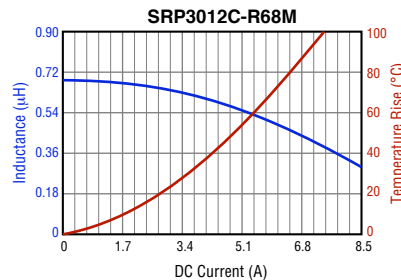
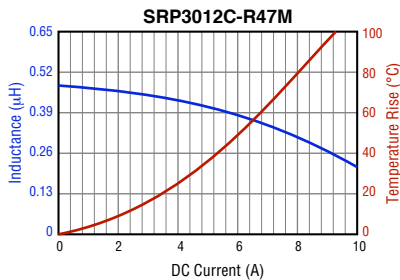
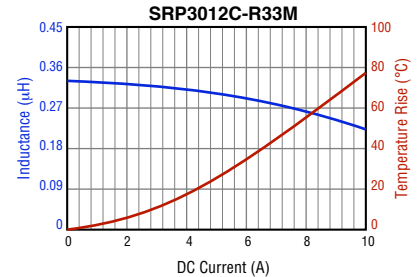
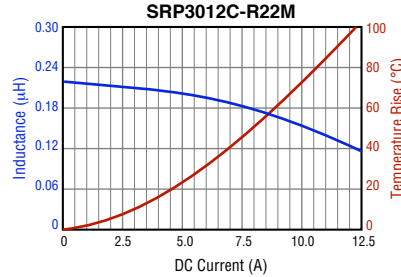
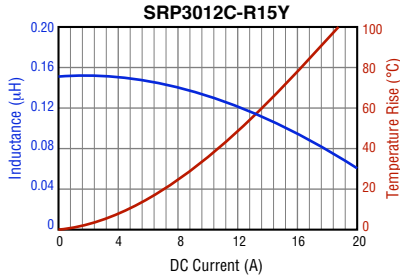
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## Soldering Profile



REFLOW TIMES: 3 MAX.

## L vs. I Charts



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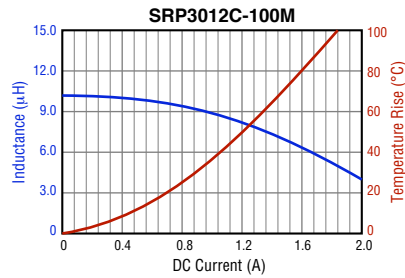
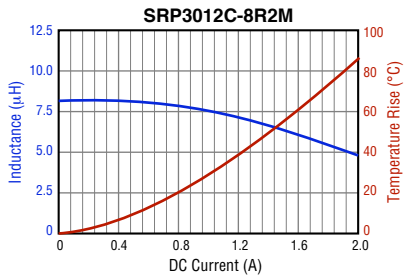
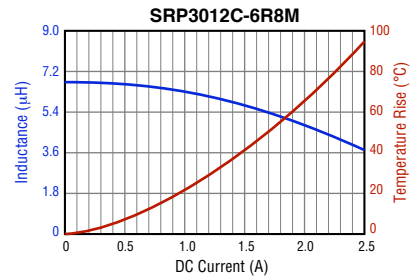
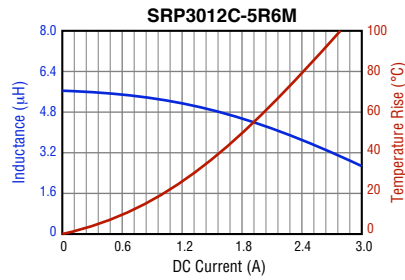
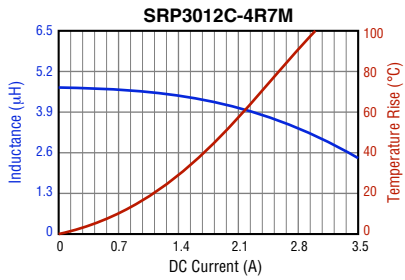
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## L vs. I Charts (Continued)



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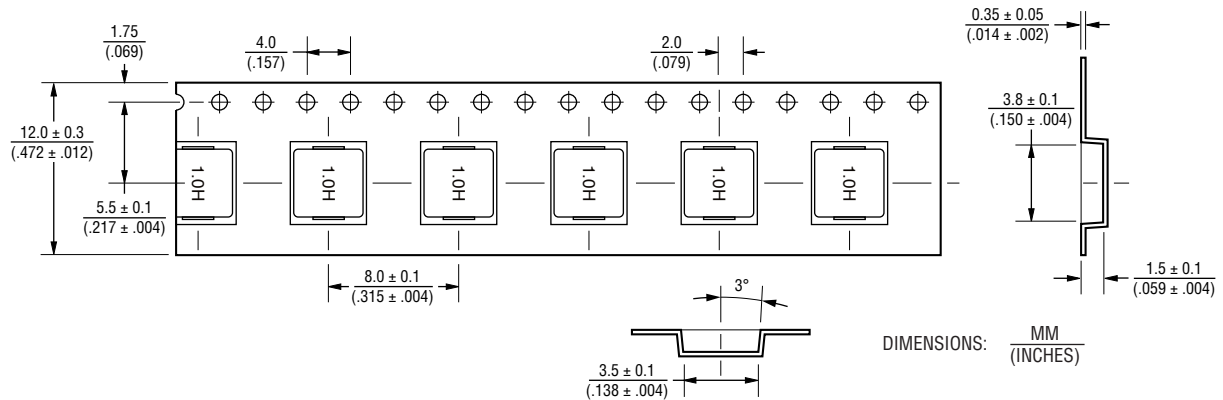
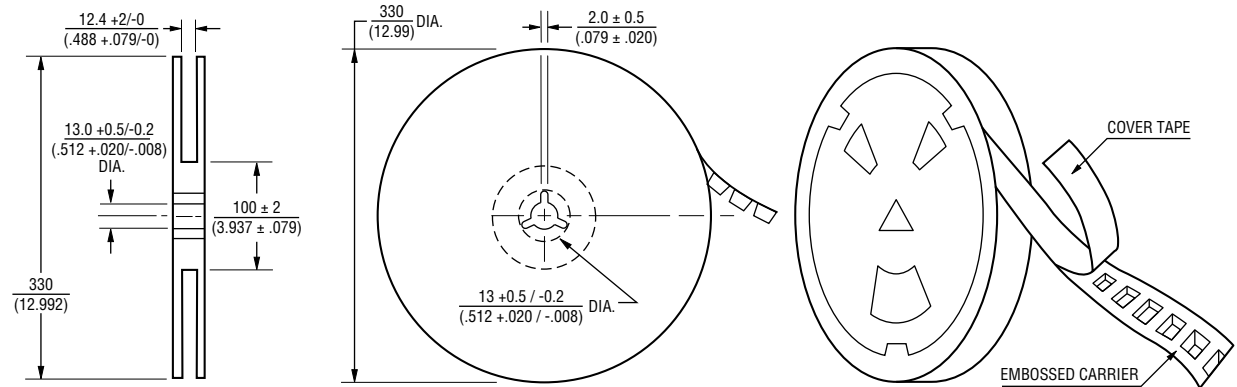
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## Packaging Specifications



USER DIRECTION OF FEED →

QTY: 4,000 PCS PER REEL

**BOURNS®**

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EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

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