



## Features

- Shielded construction – low radiation
- Low buzz noise
- Hot press molding process
- High current
- Low DCR
- RoHS compliant\*

## Applications

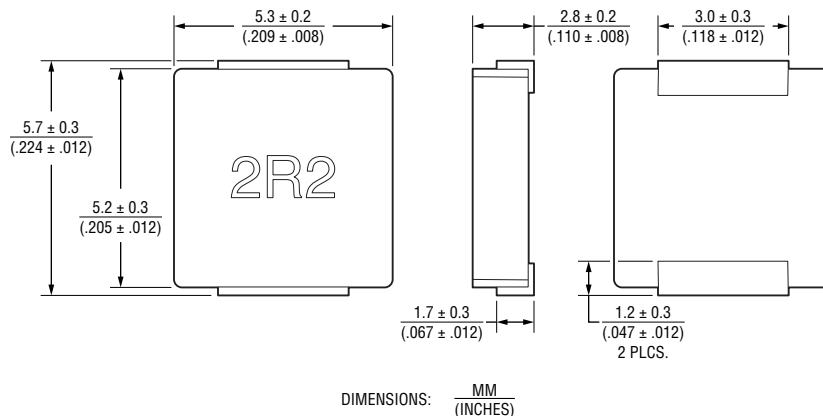
- DC-DC converters
- Power supplies

## SRP5030HMCT Series – Shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 1 V		Q 100 kHz	SRF (MHz)	DCR (mΩ)		I <sub>rms</sub> (A)	I <sub>sat</sub> (A)
	L (μH)	Tol. (%)			Typ.	Max		
SRP5030HMCT-R24M	0.24	±20	20	120	2.5	3	25	38
SRP5030HMCT-R33M	0.33			80	2.8	3.4	21	25
SRP5030HMCT-R36M	0.36		15	70	2.9	3.5	20	24
SRP5030HMCT-R47M	0.47			60	3.2	3.9	19	20
SRP5030HMCT-R68M	0.68		20	50	4.3	5.2	17	18
SRP5030HMCT-1R0M	1.0			40	5.6	6.7	15	16
SRP5030HMCT-1R2M	1.2			32	7	8.4	14.5	15.3
SRP5030HMCT-1R5M	1.5			28	8.3	10	14	15
SRP5030HMCT-2R2M	2.2			20	12	14.4	12	12.5
SRP5030HMCT-3R3M	3.3			17	17.5	21	10	10.5
SRP5030HMCT-4R7M	4.7			14	27	32.4	8.5	10
SRP5030HMCT-5R6M	5.7			13	37	44.4	7.2	8
SRP5030HMCT-6R8M	6.8			12	41.5	50	6.6	7.5
SRP5030HMCT-8R2M	8.2			10	52	62.4	5.8	7.3
SRP5030HMCT-100M	10			9	65	78	5	6.8
SRP5030HMCT-150M	15			8	98	118	3.5	3.7
SRP5030HMCT-220M	22			6	133	160	3.1	3.5

### Product Dimensions



### Additional Information

Click these links for more information:



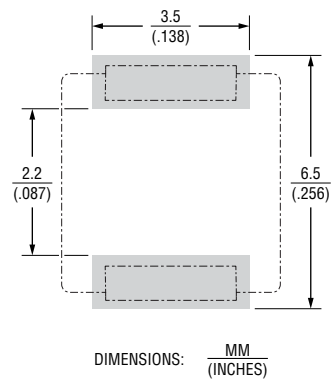
### General Specifications

Operating Temperature ..... -40 °C to +125 °C  
Storage Temperature ..... -40 °C to +125 °C  
Temperature Rise ..... 40 °C at rated I<sub>rms</sub>  
Moisture Sensitivity Level ..... 1  
ESD Classification (HBM) ..... N/A

### Materials

Core ..... Carbonyl core powder  
Wire ..... Enameled copper  
Terminal Finish ..... Cu/Ni/Sn  
Packaging ..... 2,000 pcs. per 13-inch reel

### Recommended Layout

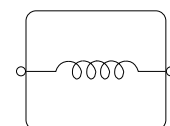


### How to Order

#### SRP5030HMCT - R24 M

Model \_\_\_\_\_  
Value Code (see table) \_\_\_\_\_  
Tolerance \_\_\_\_\_  
M = ±20 %

### Electrical Schematic



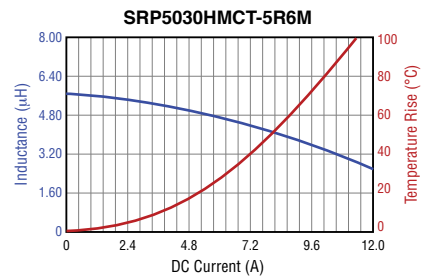
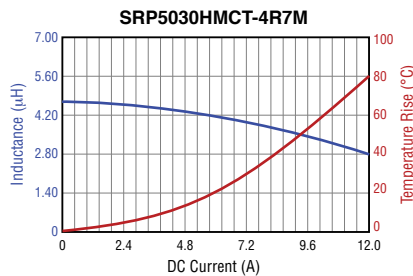
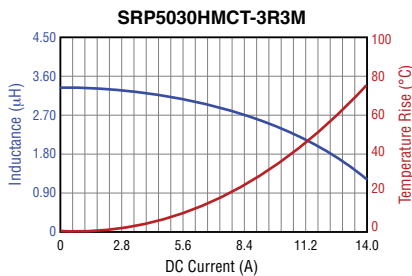
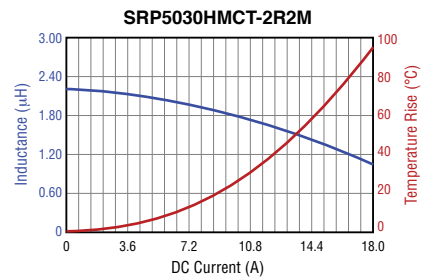
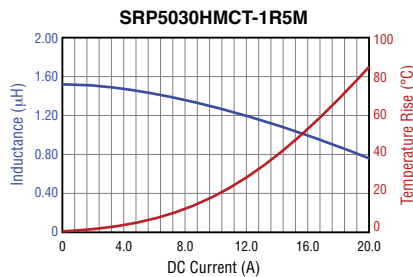
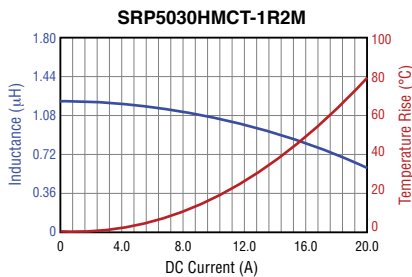
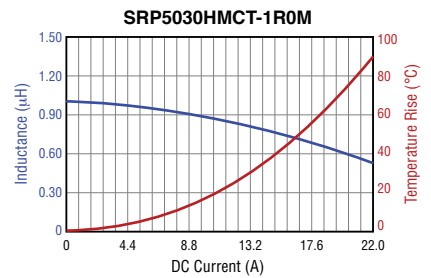
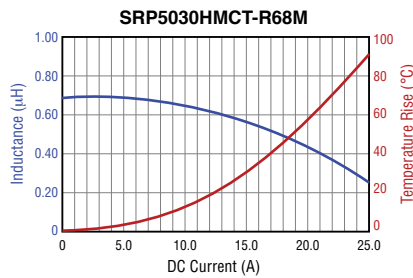
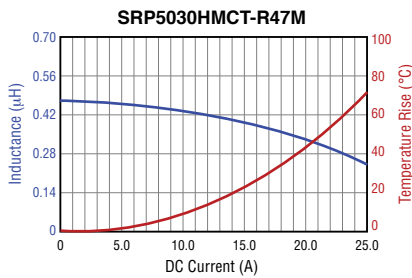
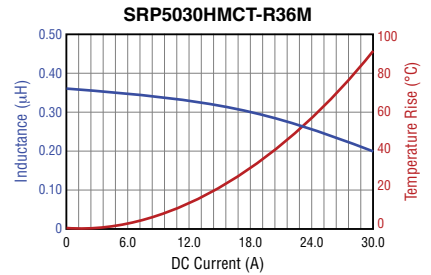
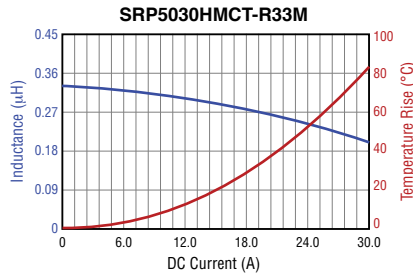
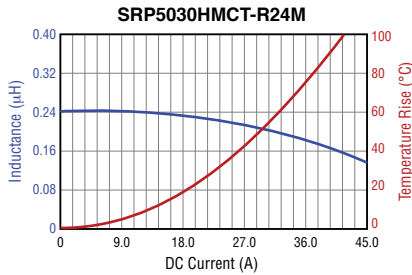
**WARNING**  
Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
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# SRP5030HMCT Series – Shielded Power Inductors

**BOURNS®**

## L vs. I Charts



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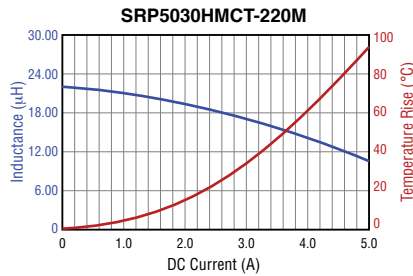
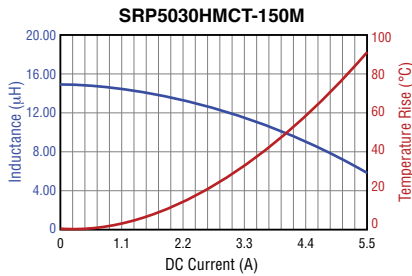
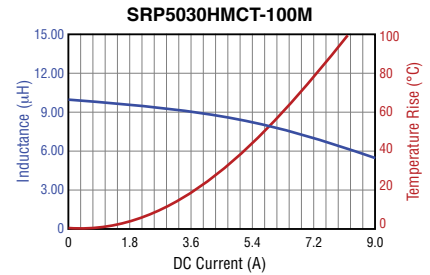
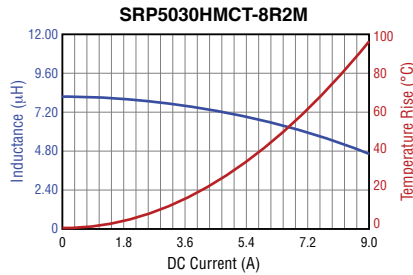
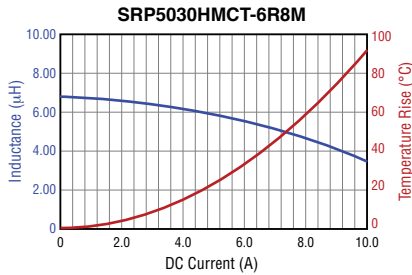
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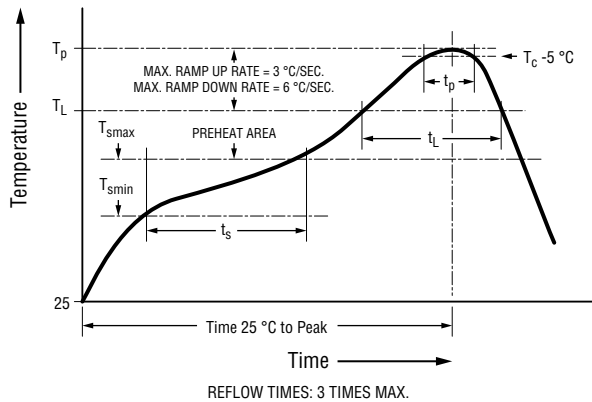
## SRP5030HMCT Series – Shielded Power Inductors

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### L vs. I Charts (continued)



### Soldering Profile



Profile Feature	Pb Free Assembly
Preheat <ul style="list-style-type: none"> <li>- Temperature Min. (<math>T_{smin}</math>)</li> <li>- Temperature Max. (<math>T_{smax}</math>)</li> <li>- Time (<math>t_s</math>) from <math>T_{smin}</math> to <math>T_{smax}</math></li> </ul>	150 °C 200 °C 60-120 seconds
Ramp-up Rate ( $T_L$ to $T_p$ )	3 °C/second max.
Liquidous temperature ( $T_L$ ) Time ( $t_L$ ) maintained above $T_L$	217 °C 60-150 seconds
Peak package body temperature ( $T_p$ )	250 °C
Time ( $t_p$ ) at $T_c - 5$ °C ( $T_p$ should be equal to or less than $T_c$ )	< 30 seconds
Ramp-Down Rate ( $T_p$ to $T_L$ )	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

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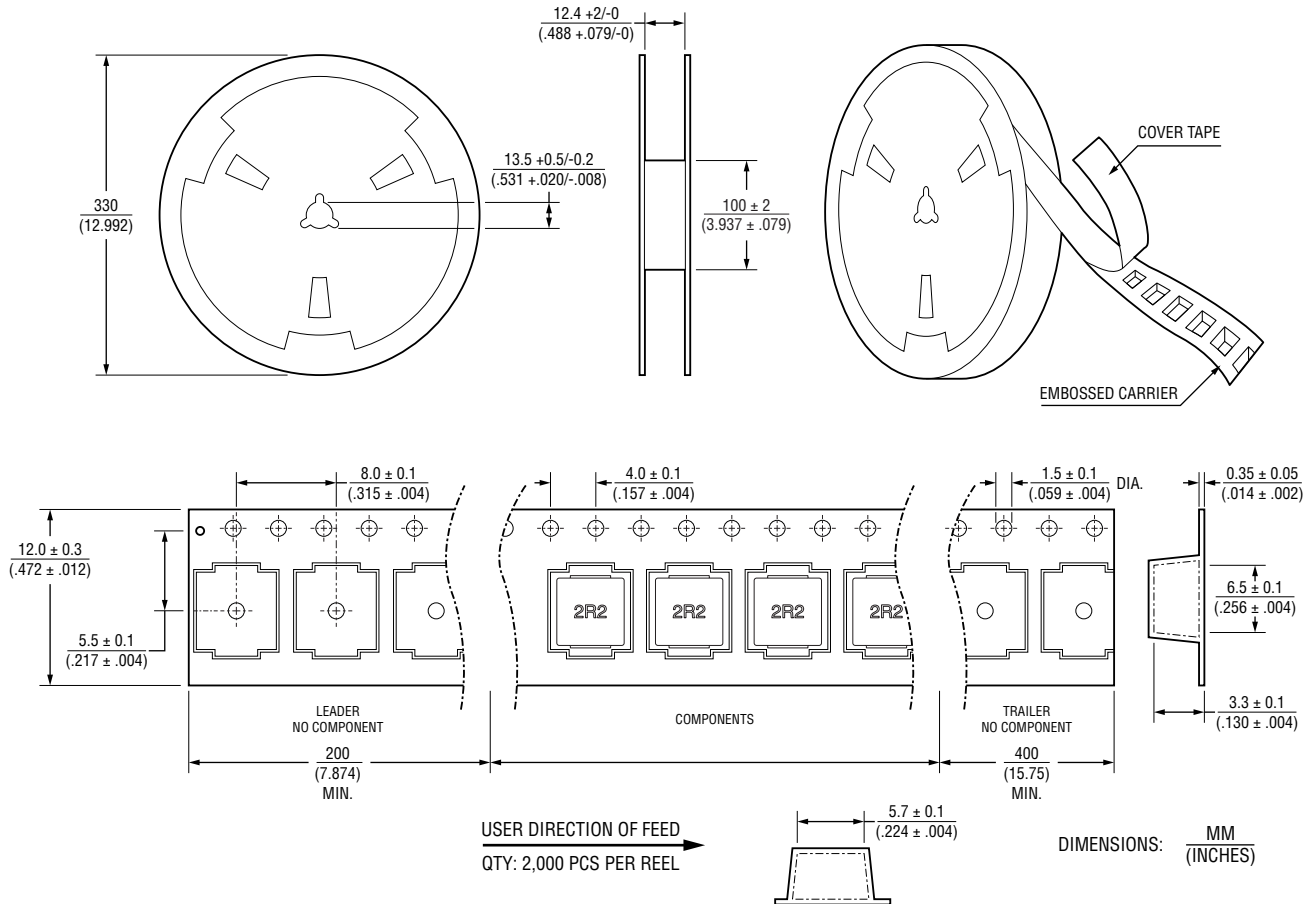
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# SRP5030HMCT Series – Shielded Power Inductors

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## Packaging Specifications



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Asia: Tel: +886-2-2562-4117 • Email: [asiacus@bourns.com](mailto:asiacus@bourns.com)

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