



**BOURNS®**

## Features

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

## Applications

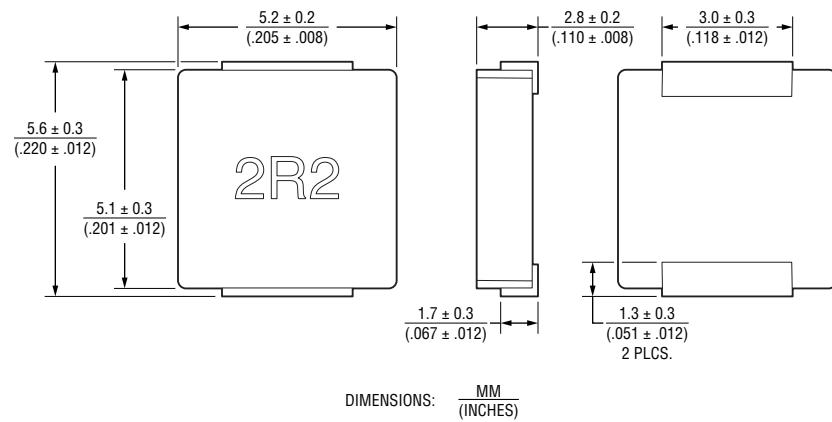
- DC-DC converters
- Power supplies

## SRP5030HMT Series – Shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 1 V		Q 100 kHz	SRF (MHz)	DCR (mΩ)		Irms (A)	Isat (A)
	L (μH)	Tol. (%)			Ref.	Typ.	Max	Typ.
SRP5030HMT-R47M	0.47	±20	20	76	3.1	3.7	18	14
SRP5030HMT-R68M	0.68			65	3.7	4.3	15	11.5
SRP5030HMT-1R0M	1.0			52	5.6	6.7	14	11
SRP5030HMT-1R5M	1.5			38	8.3	10	13	10.5
SRP5030HMT-2R2M	2.2			29	12	14.4	10.5	8.5
SRP5030HMT-3R3M	3.3			24	16	19.2	8.5	7.5
SRP5030HMT-4R7M	4.7			19	26	31.2	7	6.5
SRP5030HMT-5R6M	5.6			18	33	39.6	6.5	6.1
SRP5030HMT-6R8M	6.8			17	36	43.2	6.3	5.9
SRP5030HMT-8R2M	8.2			14	46	55.2	5.8	5.5
SRP5030HMT-100M	10			13	58	69.6	5.2	5
SRP5030HMT-150M	15			11	90	108	4.1	2.6
SRP5030HMT-220M	22			9	111	133.2	3.6	2.2

### Product Dimensions



### Additional Information

Click these links for more information:



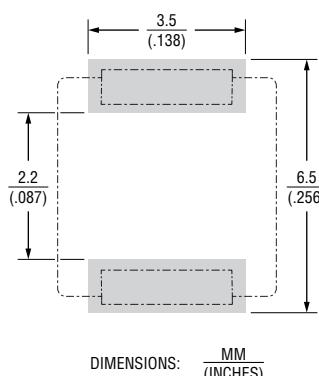
### General Specifications

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

### Materials

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

### Recommended Layout

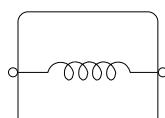


### How to Order

#### SRP5030HMT - R47 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)

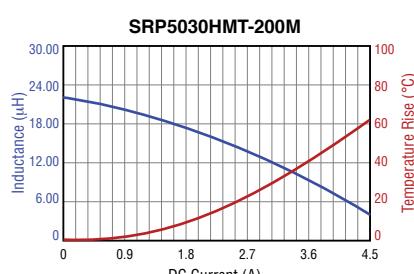
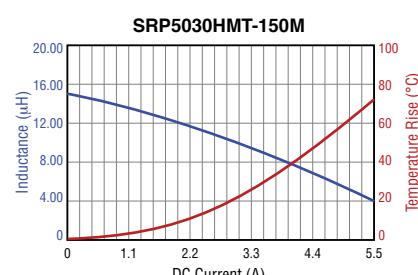
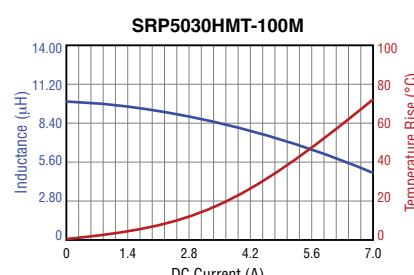
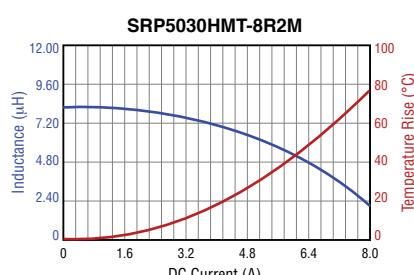
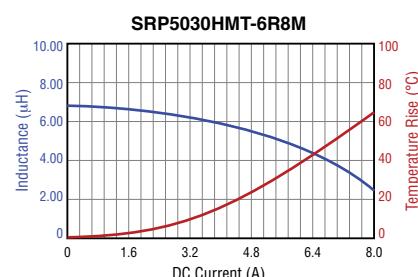
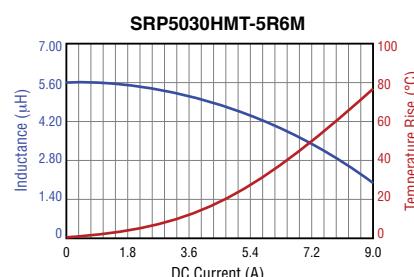
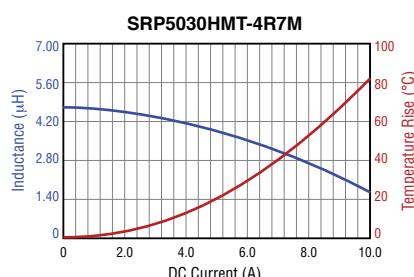
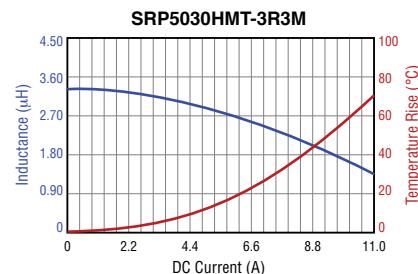
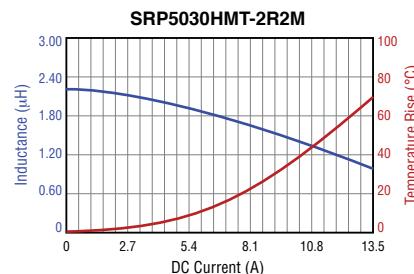
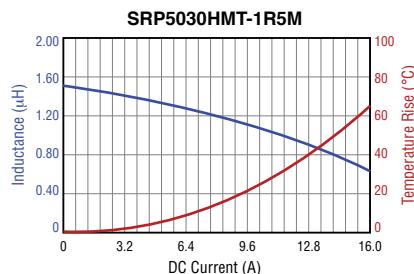
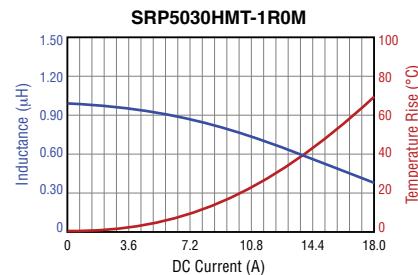
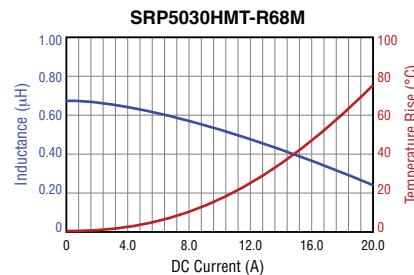
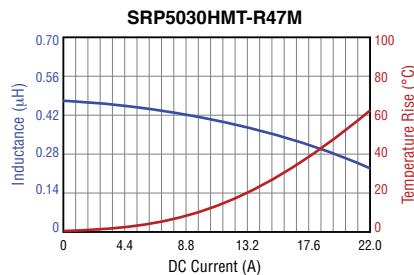
\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

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## SRP5030HMT Series – Shielded Power Inductors

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### L vs. I Charts



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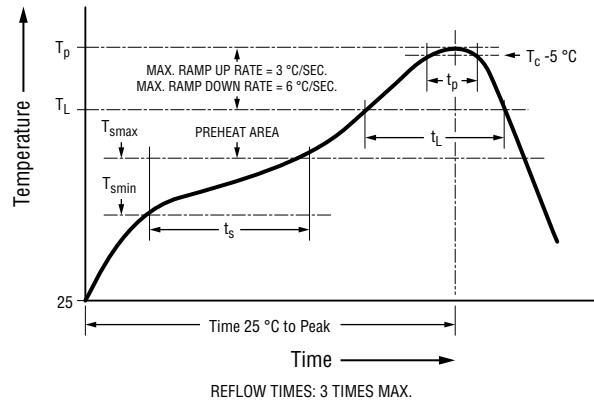
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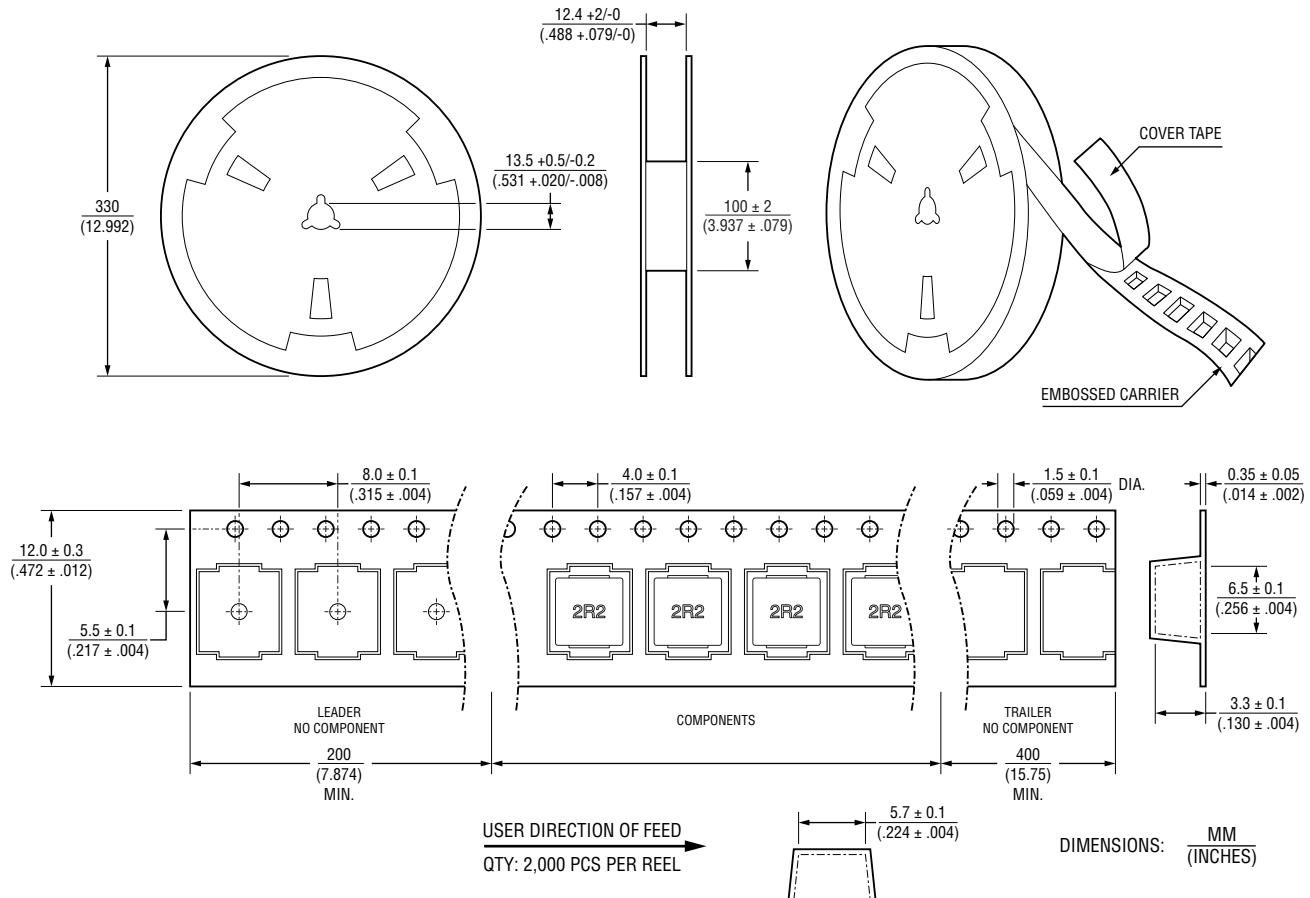
**BOURNS®**

## 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>
Ramp-up Rate ( $T_L$ to $T_p$ )	3 °C/second max.
Liquidous temperature ( $T_L$ )	217 °C
Time ( $t_L$ ) maintained above $T_L$	60-150 seconds
Peak package body temperature ( $T_p$ )	250 °C
Time ( $t_p$ ) at $T_c - 5^\circ\text{C}$ ( $T_p$ 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.

## Packaging Specifications



REV. 03/25

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