

### Features

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

### Applications

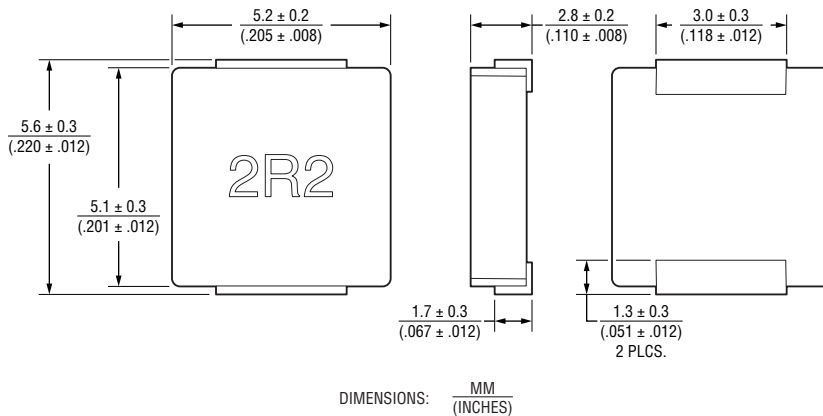
- DC-DC converters
- Power supplies

## SRP5030HMT Series – Shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 1 V		Q 100 kHz	SRF (MHz)	DCR (mΩ)		I <sub>rms</sub> (A)	I <sub>sat</sub> (A)
	L (μH)	Tol. (%)			Typ.	Max		
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:



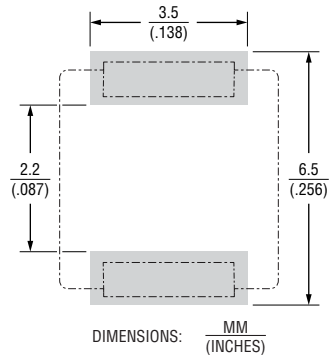
### General Specifications

Operating Temperature ..... -40 °C to +125 °C  
 Storage Temperature ..... -40 °C to +125 °C  
 Temperature Rise ..... 40 °C at rated I<sub>rms</sub>  
 Rated Current ..... Inductance drops 30 % at I<sub>sat</sub>  
 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

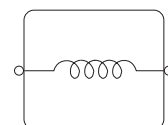


### How to Order

**SRP5030HMT - R47 M**

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

### Electrical Schematic



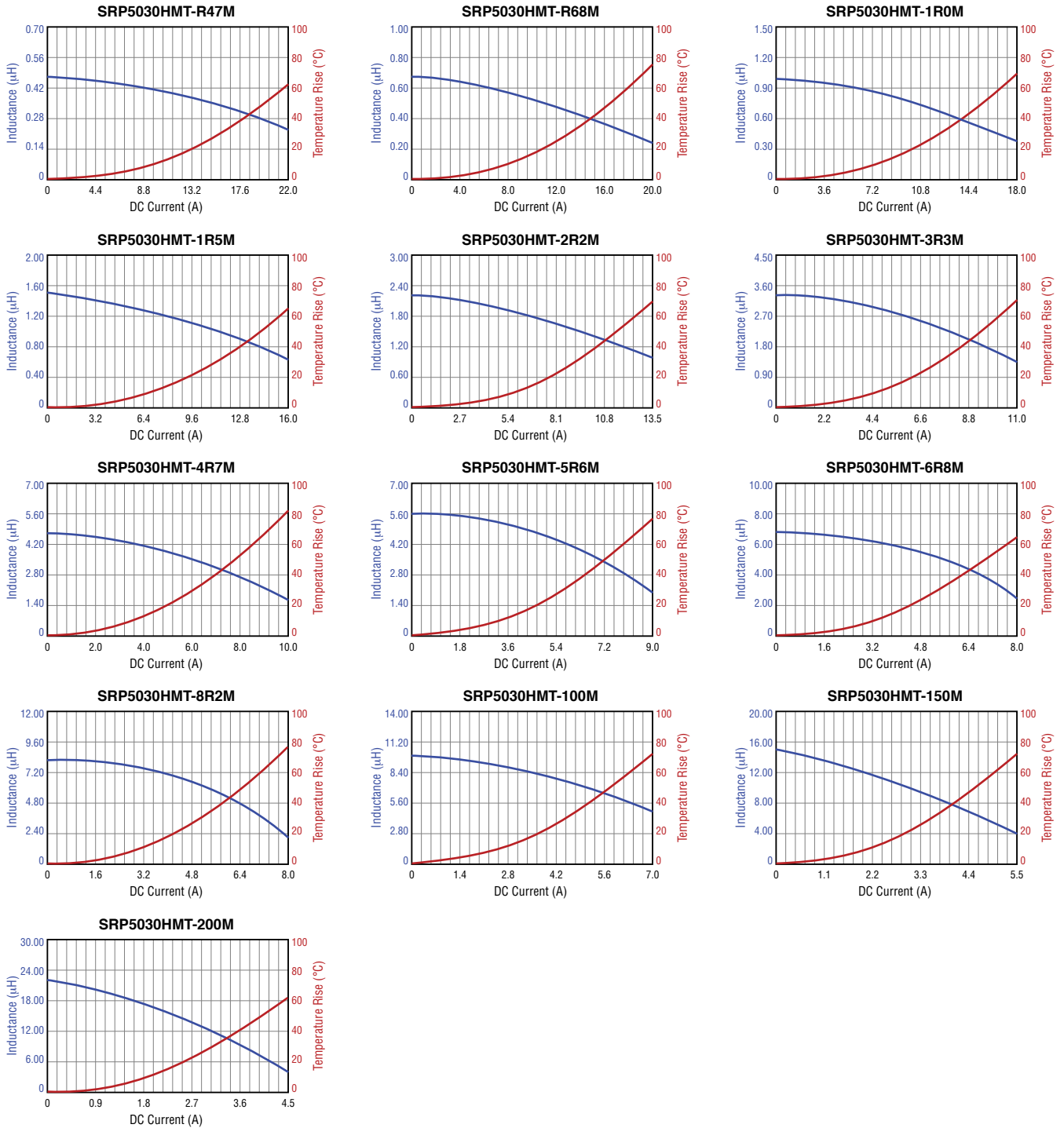
**CALIFORNIA WARNING:** Can expose you to lead, a carcinogen and reproductive toxicant.  
 See [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
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# SRP5030HMT Series – Shielded Power Inductors



## L vs. I Charts

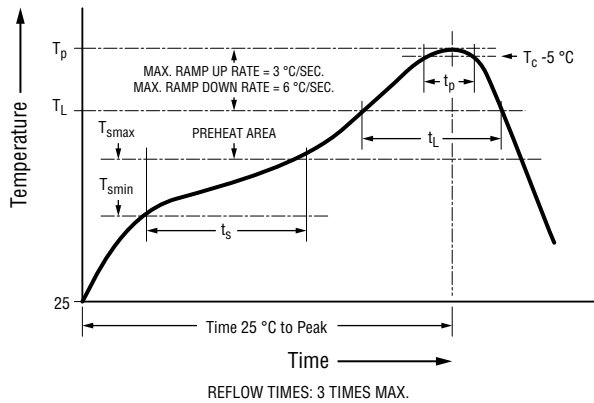


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# SRP5030HMT Series – Shielded Power Inductors

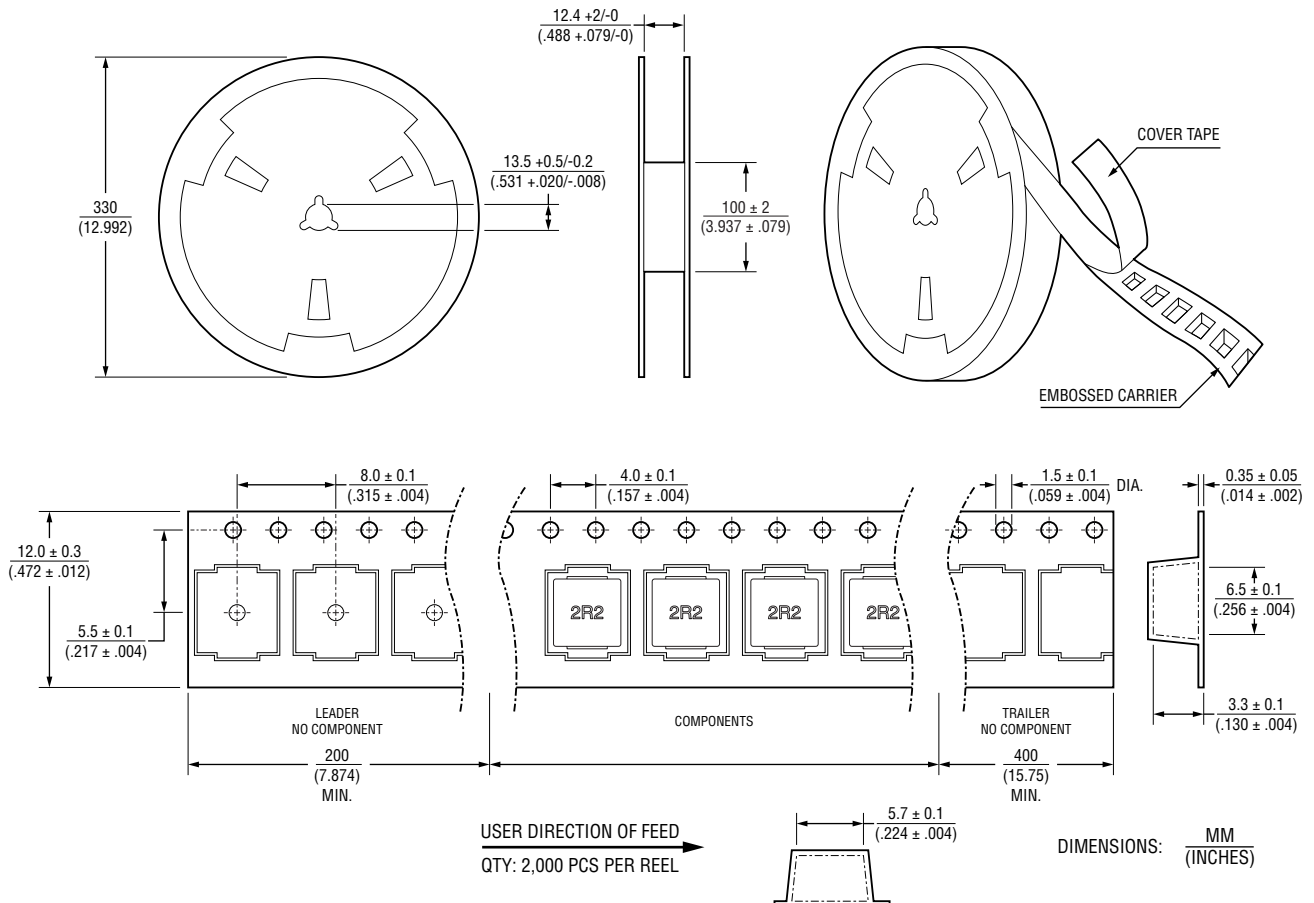
**BOURNS®**

## Soldering Profile



Profile Feature	Pb Free Assembly
Preheat	
- Temperature Min. ( $T_{smin}$ )	150 °C
- Temperature Max. ( $T_{smax}$ )	200 °C
- Time ( $t_s$ ) from $T_{smin}$ to $T_{smax}$	60-120 seconds
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. 02/26

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