



## Features

- Shielded construction – low radiation
- Low buzz noise
- Hot press molding process
- Low profile 2.4 mm max.
- High current
- Low DCR
- RoHS compliant\* and halogen free\*\*

## Applications

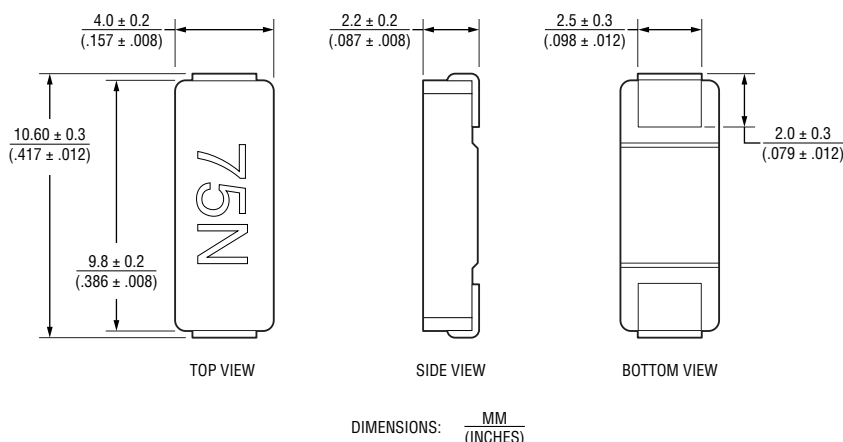
- PoL converters
- Data centers

## SRP1024HMCT – Shielded Power Inductor

### Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 1 V		DCR (mΩ) ±5 %	Irms (A) Typ.	Isat (A) Typ.
	L (μH)	Tol. (%)			
SRP1024HMCT-75NM	0.075	±20	0.4	50.0	65.0

### Product Dimensions



### Additional Information

Click these links for more information:



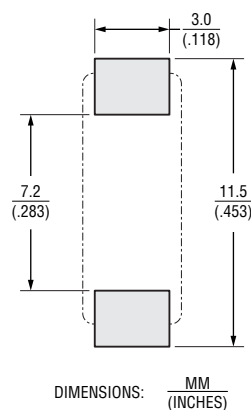
### General Specifications

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 ..... Carbonyl core powder  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn 99.3 / Cu 0.7  
 Packaging ..... 2,500 pcs. per 13-inch reel

### Recommended Layout

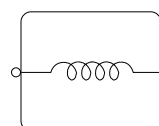


### How to Order

SRP1024HMCT - 75N M

Model \_\_\_\_\_  
 Value Code \_\_\_\_\_  
 Tolerance \_\_\_\_\_  
 M = ±20 %

### Electrical Schematic



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**WARNING Cancer and Reproductive Harm**

[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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

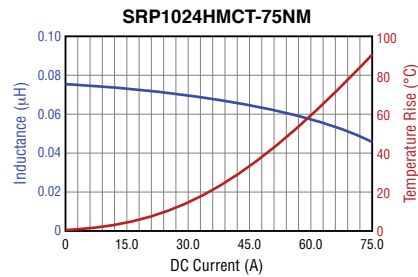
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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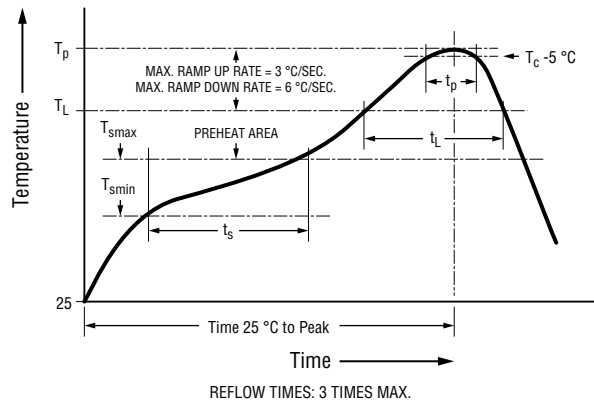
# SRP1024HMCT – Shielded Power Inductor

**BOURNS®**

## L vs. I Charts



## 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 ( $T_L$ )	217 °C
Time ( $t_L$ ) maintained above $T_L$	60-150 seconds
Peak package body temperature ( $T_p$ )	260 °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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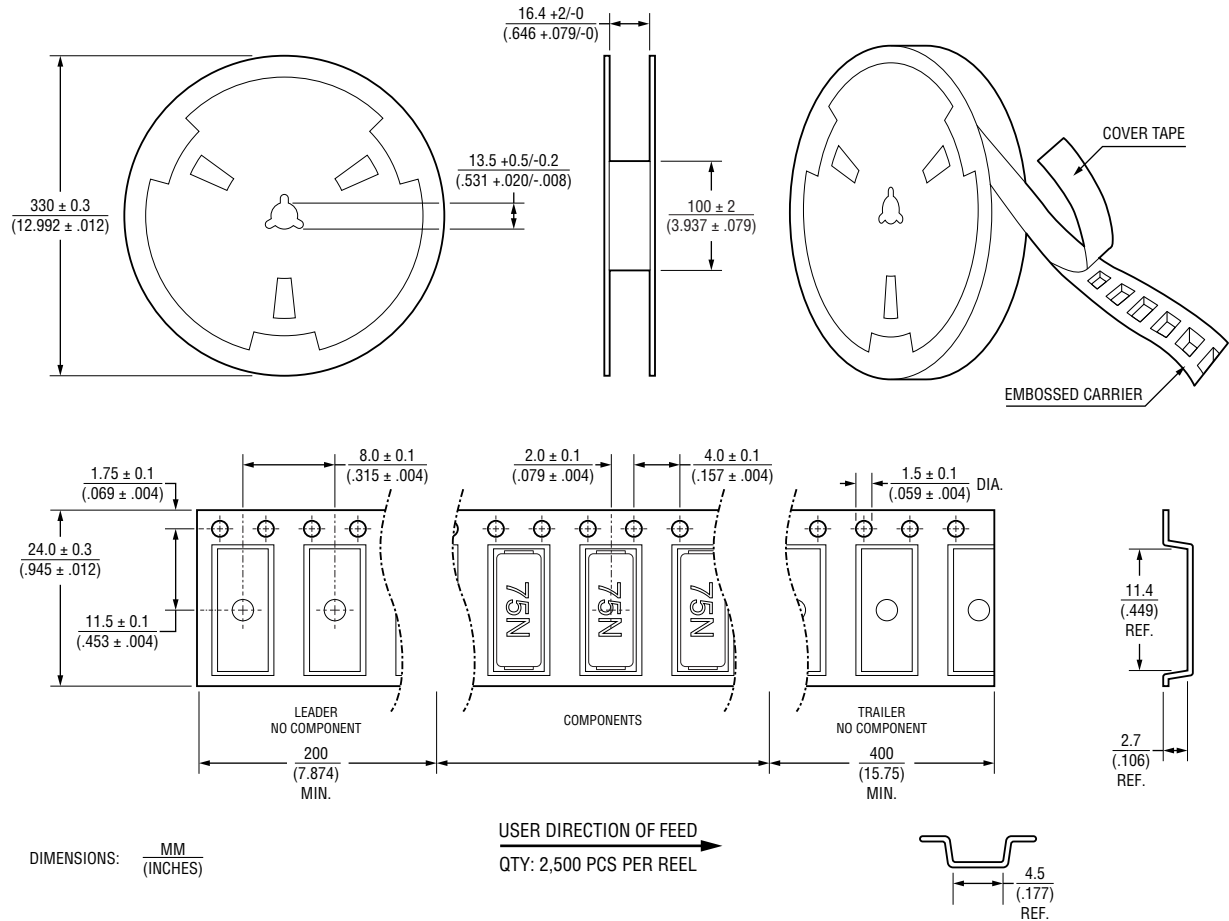
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## Packaging Specifications



REV. 07/25

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