



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

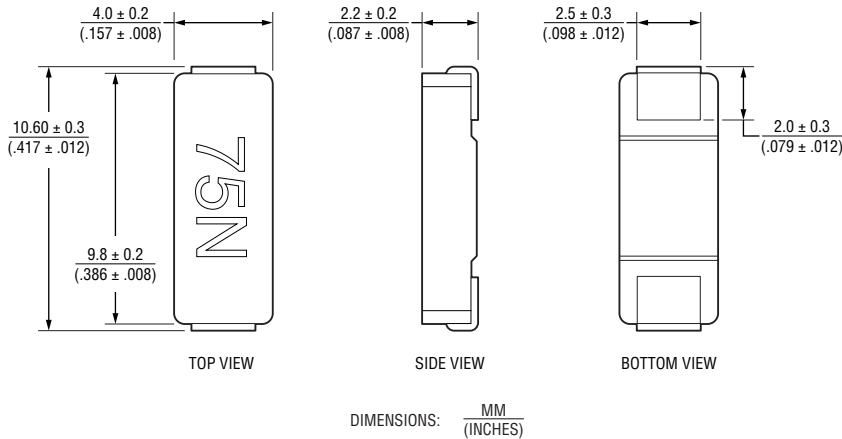
- PoL converters
- Data centers

SRP1024HMCT Series – Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 1 V		DCR (mΩ) ±5 %	I _{rms} (A) Typ.	I _{sat} (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:



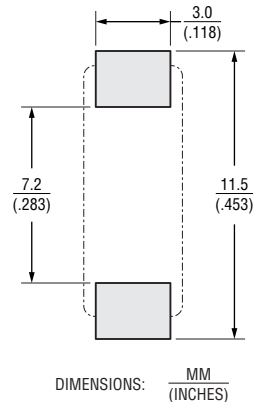
General Specifications

Operating Temperature -40 °C to +125 °C
 Storage Temperature -40 °C to +125 °C
 Temperature Rise 40 °C at rated I_{rms}
 Rated Current Inductance drops 30 % at I_{sat}
 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

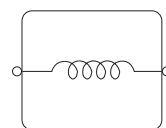


How to Order

SRP1024HMCT - 75N M

Model _____
 Value Code _____
 Tolerance _____
 M = ±20 %

Electrical Schematic



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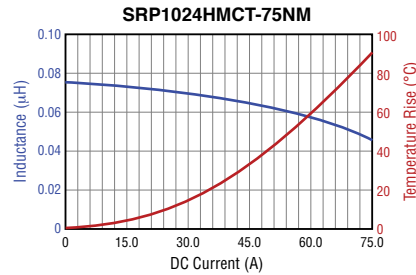
Americas: Tel: +1 951-781-5500 • Email: americus@bourns.com
Mexico: Tel: +52-614-478-0400 • Email: mexicus@bourns.com
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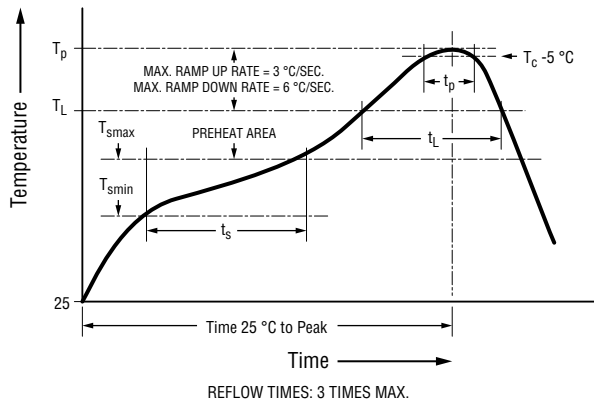
CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant.
 See www.P65Warnings.ca.gov

* 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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L vs. I Charts



Soldering Profile

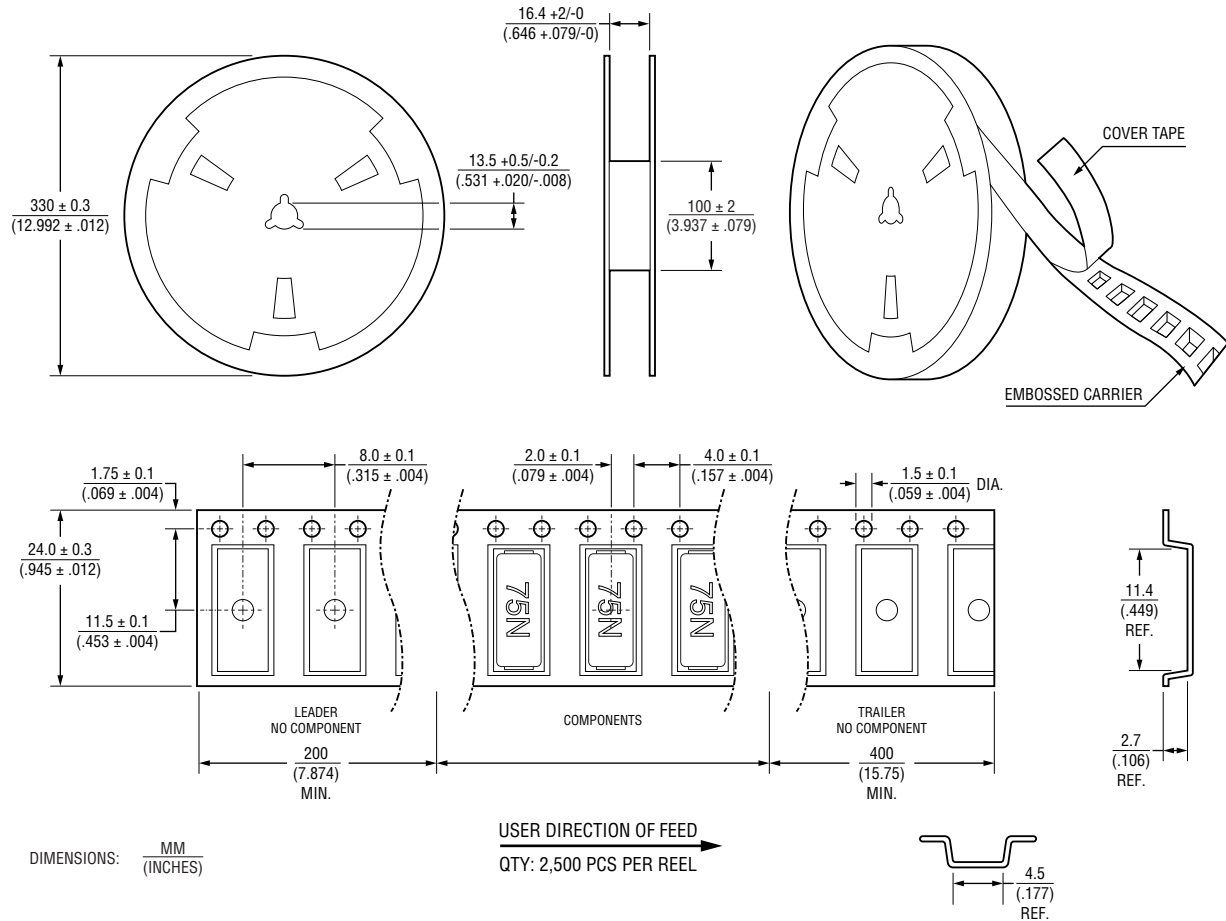


Profile Feature	Pb Free Assembly
Preheat <ul style="list-style-type: none"> - Temperature Min. (T_{smin}) - Temperature Max. (T_{smax}) - Time (t_s) from T_{smin} to T_{smax} 	150 °C 200 °C 60-120 seconds
Ramp-up Rate (T_L to T_p)	3 °C/second max.
Liquidous temperature (T_L) Time (t_L) maintained above T_L	217 °C 60-150 seconds
Peak package body temperature (T_p)	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.

SRP1024HMCT Series – Shielded Power Inductors

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Packaging Specifications



REV. 02/26

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