

## Features

- Formerly **J. W. Miller**® model
- Low height of only 7.0 mm
- Inductance as low as 0.78  $\mu\text{H}$
- Current up to 15 amps
- RoHS compliant\*

## Applications

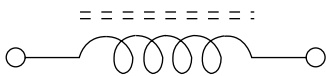
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

# PM5022H Series - SMD Power Inductors

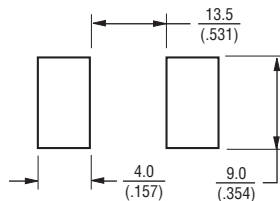
## Electrical Specifications

Bourns Part No.	Inductance 100 kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC (m $\Omega$ )	Irms Max. (A)	Isat Typ. (A)
	( $\mu\text{H}$ )	Tol. %						
PM5022H-R78M-RC	0.78	$\pm 20$	30	5	104.0	2.6	15.0	30.0
PM5022H-1R5M-RC	1.5	$\pm 20$	30	3	60.0	5.0	15.0	25.0
PM5022H-2R2M-RC	2.2	$\pm 20$	35	3	51.0	7.5	13.0	20.0
PM5022H-3R3M-RC	3.3	$\pm 20$	38	3	39.0	7.8	9.0	17.0
PM5022H-3R9M-RC	3.9	$\pm 20$	38	3	36.0	12.0	9.0	15.0
PM5022H-4R7M-RC	4.7	$\pm 20$	38	3	33.0	8.8	8.5	15.0
PM5022H-6R0M-RC	6.0	$\pm 20$	43	3	28.0	17.0	7.5	12.0
PM5022H-7R8M-RC	7.8	$\pm 20$	36	3	26.0	20.0	7.5	11.0
PM5022H-100M-RC	10	$\pm 20$	53	5	20.0	17.2	6.5	10.0
PM5022H-150M-RC	15	$\pm 20$	38	5	16.0	28.8	5.0	9.0

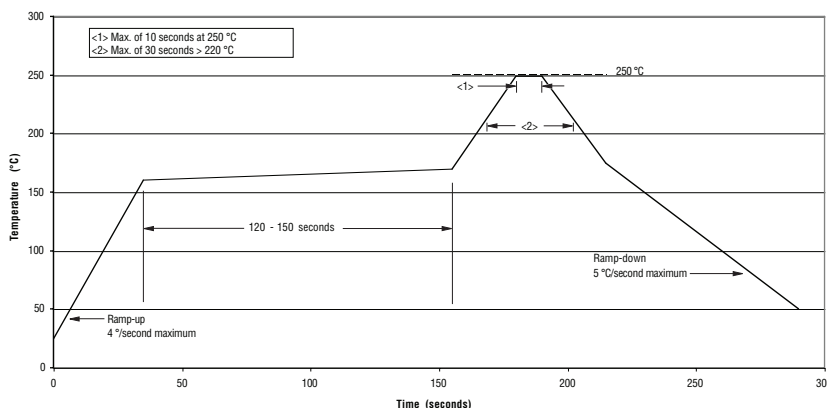
## Electrical Schematic



## Recommended Layout



## Soldering Profile



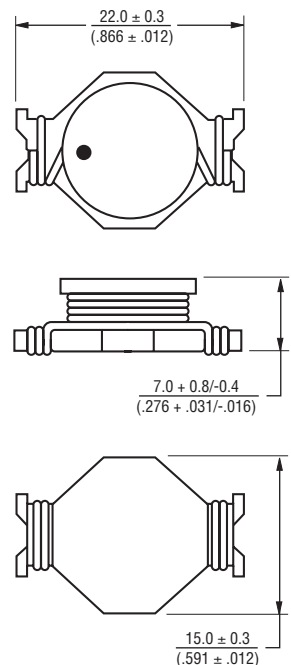
## General Specifications

Test Voltage ..... 0.1 V  
 Reflow soldering .... 250 °C; 10 sec max.  
 (In compliance with JEDEC, J-STD-020C, Table 4-2)  
 Operating Temperature ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature .. -40 °C to +125 °C  
 Resistance to Soldering Heat ..... 250 °C, 10 sec. max.  
 Moisture Sensitivity Level ..... 2  
 ESD Classification (HBM) ..... N/A

## Materials

Core ..... Ferrite DR  
 Wire ..... Enameled copper  
 Terminal ..... Cu/Ag/Sn  
 Base ..... Phenolic T375J  
 Adhesive ..... Epoxy resin  
 Rated Current ..... Ind. drop 10 % typ. at Isat  
 Temperature Rise ..... 40 °C max. at rated Irms  
 Packaging ..... 250 pcs. per reel

## Product Dimensions



● = START OF WINDING

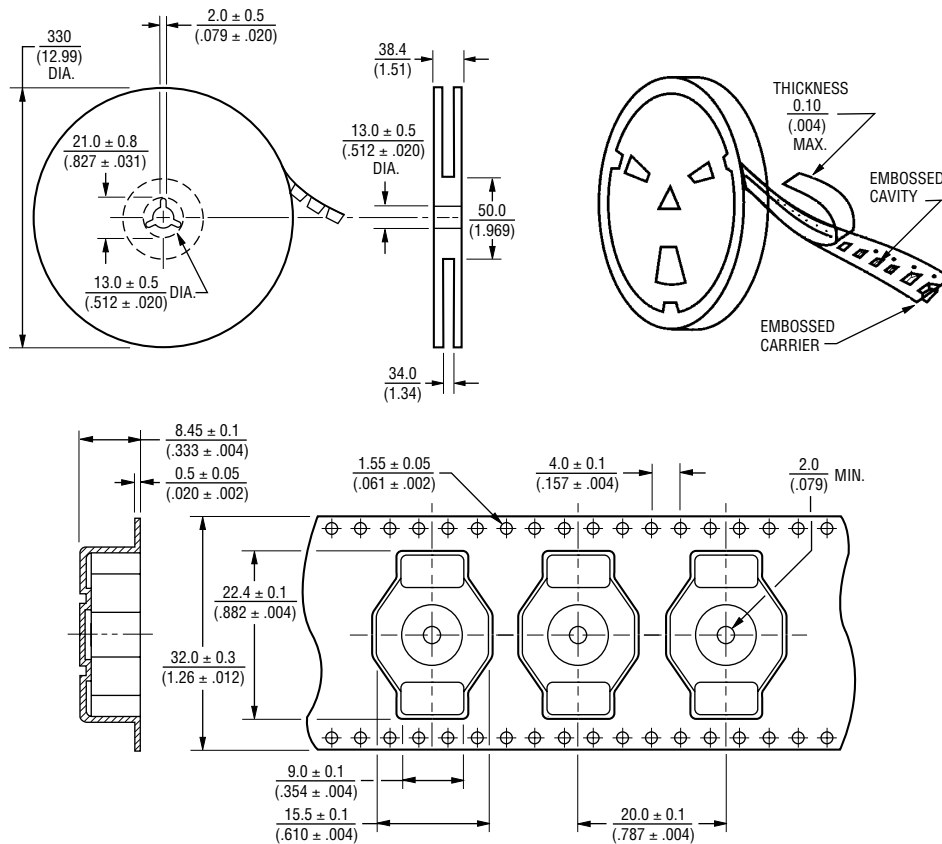
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

# PM5022H Series - SMD Power Inductors

**BOURNS®**

## Packaging Specifications



QTY: 250 PCS. PER REEL

DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

REV. 03/18

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