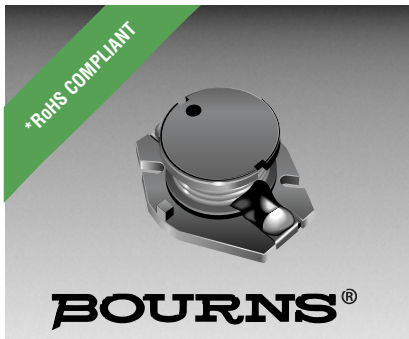




**THE DATASHEET OF  
PM5022-102K-RC**





## Features

- Formerly **J. W. Miller®** model
- Available in E6 series
- Low profile of only 6.6 mm
- Inductance as low as 1  $\mu$ H
- RoHS compliant\*

## Applications

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

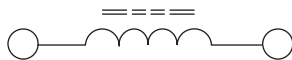
# PM5022 Series - SMD Power Inductor

### Electrical Specifications

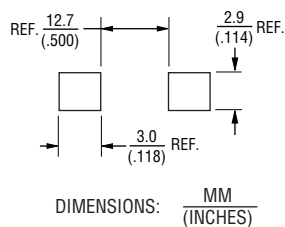
Bourns Part No.	Inductance 100 kHz		Test Q Ref.	SRF Frequency (MHz)	Typ. (MHz)	RDC (m $\Omega$ )	I rms Max. (A)	I sat Typ. (A)
	( $\mu$ H)	Tol. %						
PM5022-1R0M-RC	1.0	$\pm 20$	21	7.96	100.0	4.0	10.0	30.00
PM5022-2R2M-RC	2.2	$\pm 20$	22	7.96	55.0	6.8	9.00	22.00
PM5022-3R3M-RC	3.3	$\pm 20$	22	7.96	40.0	9.8	7.60	17.00
PM5022-5R6M-RC	5.6	$\pm 20$	23	7.96	30.0	15.0	6.40	12.80
PM5022-8R2M-RC	8.2	$\pm 20$	22	7.96	27.0	20.0	7.00	9.40
PM5022-100M-RC	10	$\pm 20$	22	2.52	25.0	25.0	5.30	10.00
PM5022-150M-RC	15	$\pm 20$	20	2.52	17.0	35.0	4.30	8.00
PM5022-220M-RC	22	$\pm 20$	22	2.52	13.0	45.0	3.60	6.70
PM5022-330M-RC	33	$\pm 20$	24	2.52	11.0	68.0	3.00	5.40
PM5022-470M-RC	47	$\pm 20$	22	2.52	9.0	95.0	2.50	4.60
PM5022-680M-RC	68	$\pm 20$	22	2.52	8.0	130.0	2.10	3.80
PM5022-101<1>-RC	100	$\pm 10$	25	0.796	7.0	190.0	1.70	3.20
PM5022-151<1>-RC	150	$\pm 10$	23	0.796	5.0	270.0	1.40	2.60
PM5022-221<1>-RC	220	$\pm 10$	20	0.796	4.5	420.0	1.10	2.20
PM5022-331<1>-RC	330	$\pm 10$	18	0.796	3.5	580.0	1.00	1.80
PM5022-471<1>-RC	470	$\pm 10$	15	0.796	3.0	820.0	0.80	1.50
PM5022-681<1>-RC	680	$\pm 10$	12	0.796	2.5	1200.0	0.70	1.20
PM5022-102<1>-RC	1000	$\pm 10$	10	0.252	2.0	1800.0	0.50	1.00

<1> Enter tolerance code: K =  $\pm 10$  %, M =  $\pm 20$  %.

### Electrical Schematic



### Recommended Layout



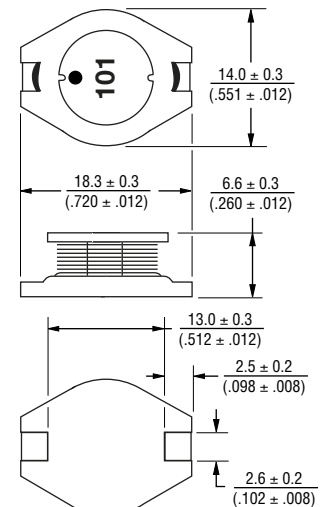
### General Specifications

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 ..... Enamelled copper  
 Base ..... LCP E4008  
 Terminal ..... Cu/Sn  
 Rated Current  
 ..... Ind. drop 10 % typ. at Isat  
 Temp. Rise ..... 40 °C max. at rated Irms  
 Packaging ..... 250 pcs. per reel

### Product Dimensions



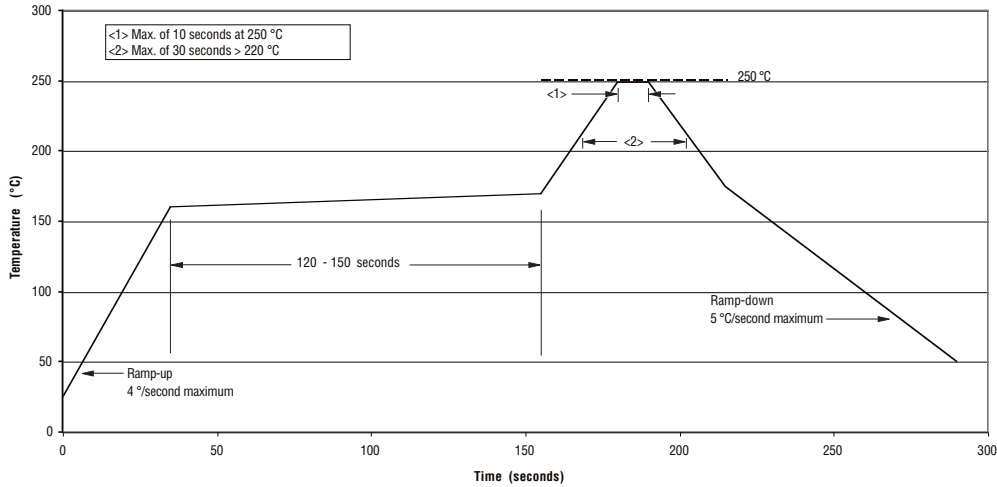
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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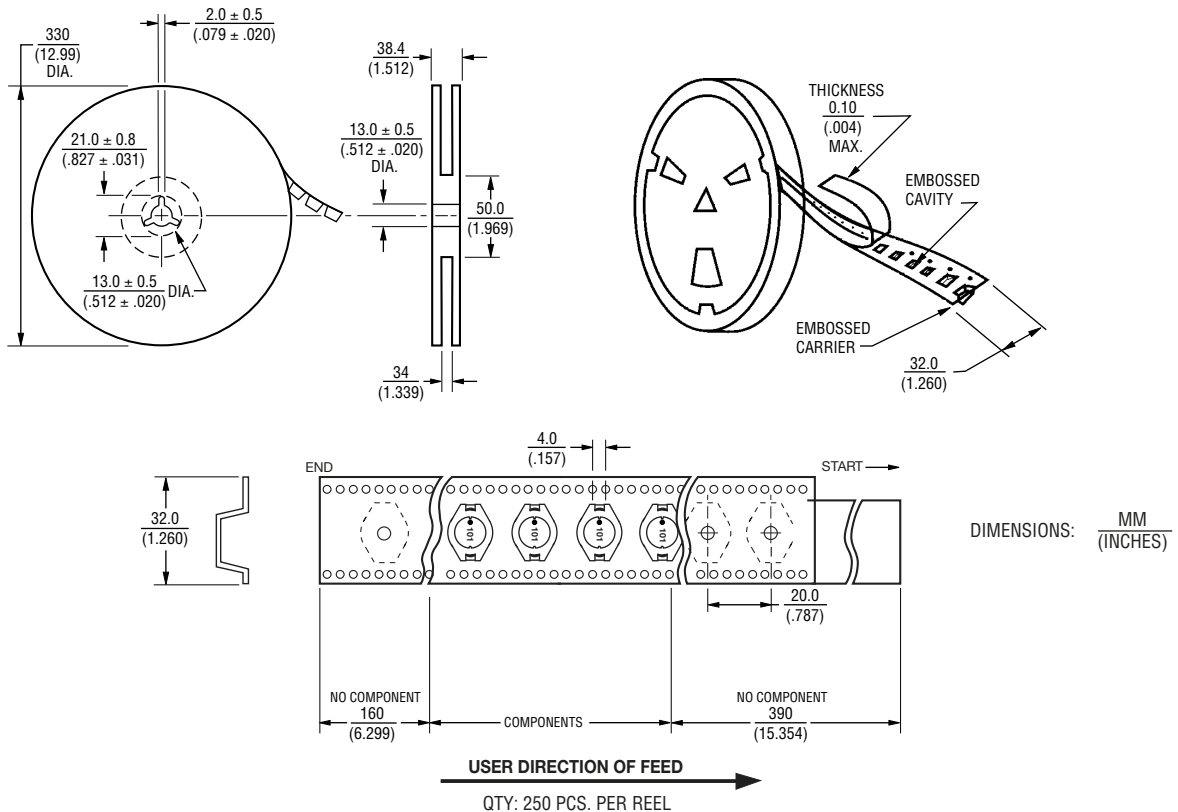
# PM5022 Series - SMD Power Inductor

**BOURNS®**

## Soldering Profile



## Packaging Specifications



REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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