

## Features

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

## Applications

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

# PM5022 Series - SMD Power Inductor

### Electrical Specifications

Bourns Part No.	Inductance 100 kHz		Test Q Ref.	SRF Frequency (MHz)	Typ. (MHz)	I rms RDC (m $\Omega$ )	I sat Max. (A)	Typ. (A)
	( $\mu\text{H}$ )	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	$\pm 10/\pm 20$	23	0.796	5.0	270.0	1.40	2.60
PM5022-221<1>-RC	220	$\pm 10/\pm 20$	20	0.796	4.5	420.0	1.10	2.20
PM5022-331<1>-RC	330	$\pm 10/\pm 20$	18	0.796	3.5	580.0	1.00	1.80
PM5022-471<1>-RC	470	$\pm 10/\pm 20$	15	0.796	3.0	820.0	0.80	1.50
PM5022-681<1>-RC	680	$\pm 10/\pm 20$	12	0.796	2.5	1200.0	0.70	1.20
PM5022-102<1>-RC	1000	$\pm 10/\pm 20$	10	0.252	2.0	1800.0	0.50	1.00

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

### Electrical Schematic



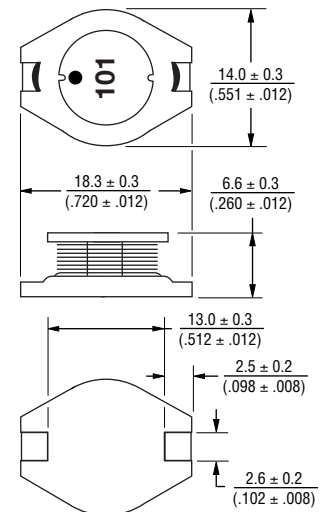
### General Specifications

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.

### Materials

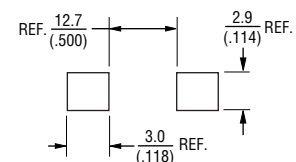
Core ..... Ferrite DR  
 Wire ..... Enameled copper  
 Base ..... LCP E4008  
 Terminal ..... Cu/Sn  
 Rated Current  
 ..... Ind. drop 10 % typ. at Isat  
 Temperature Rise ..... 40 °C max.  
 at rated I rms  
 Packaging ..... 250 pcs. per reel

### Product Dimensions



• = START OF WINDING

### Recommended Layout



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.

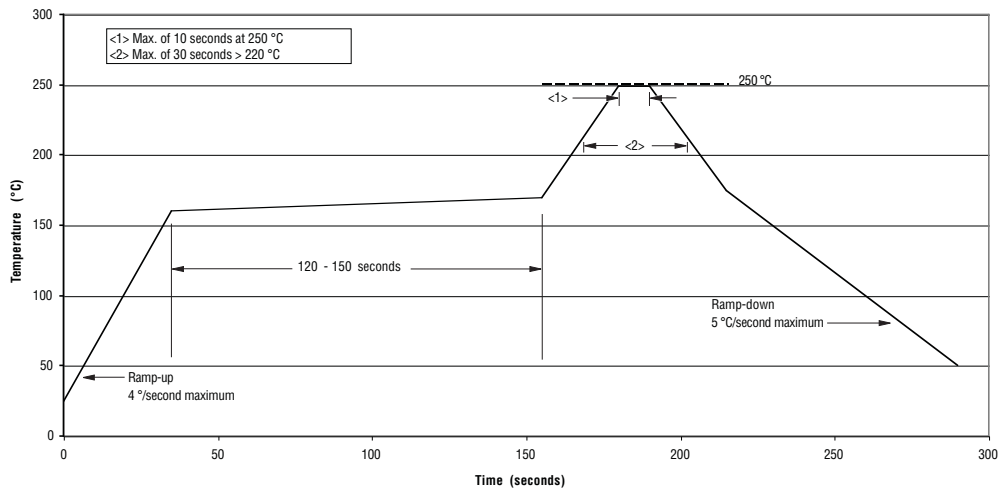
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

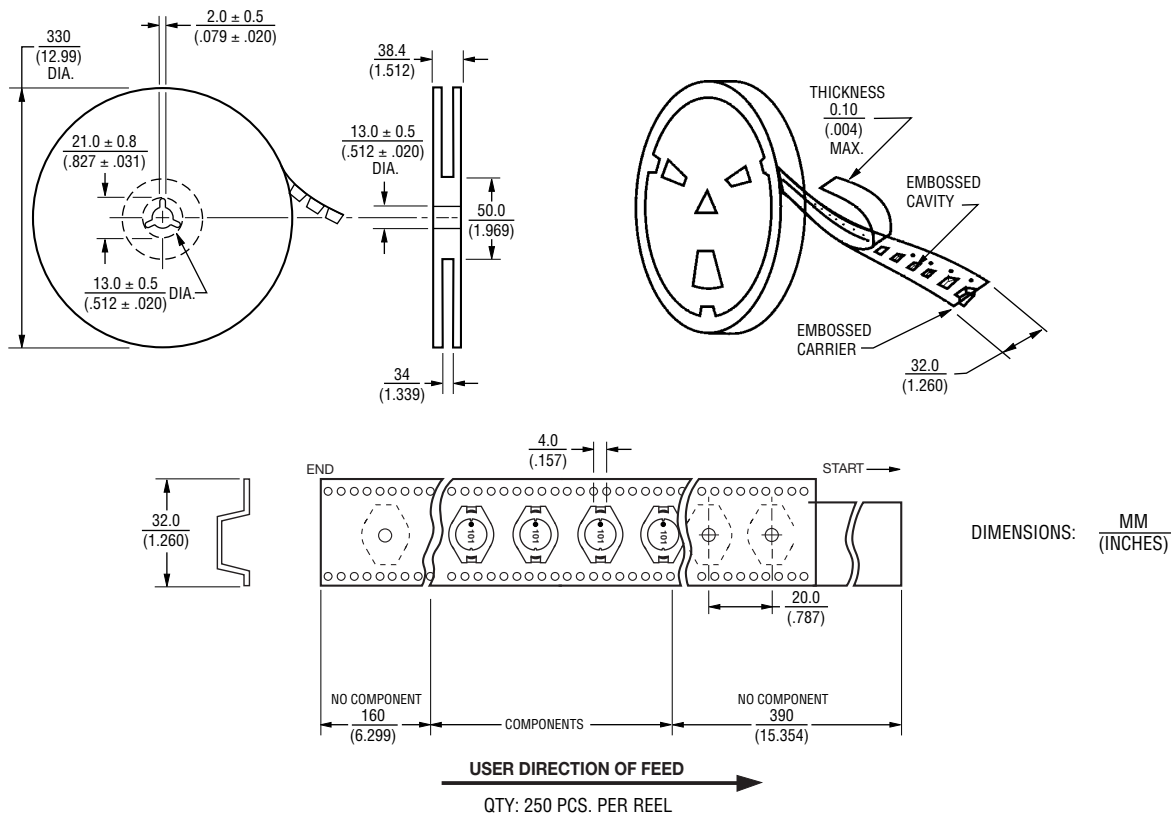
# PM5022 Series - SMD Power Inductor



## Soldering Profile



## Packaging Specifications



REV. 02/15

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