



### Features

- Formerly J.W. Miller® model
- Available in E12 series
- Unit height of 6.8 mm
- Current up to 8 A Isat
- RoHS compliant\*

### Applications

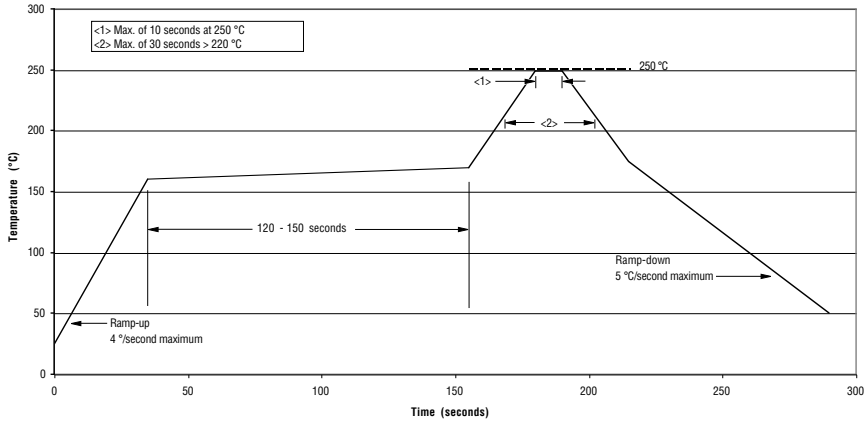
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

## PM5022S Series - Shielded Power Inductor

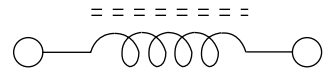
### Electrical Specifications

Bourns Part No.	Inductance 100 kHz		Q Ref.	Test Frequency (MHz)	SRF Typ. (MHz)	RDC -20 % (Ω)	I rms Max. (A)	I sat Typ. (A)
	(μH)	Tol. %						
PM5022S-100M-RC	10	± 20	56	2.52	19.0	0.033	4.00	8.20
PM5022S-150M-RC	15	± 20	53	2.52	17.5	0.039	3.60	7.20
PM5022S-220M-RC	22	± 20	51	2.52	16.0	0.053	3.00	6.20
PM5022S-330M-RC	33	± 20	44	2.52	10.0	0.083	2.50	5.00
PM5022S-470M-RC	47	± 20	40	2.52	8.0	0.110	2.00	4.20
PM5022S-680M-RC	68	± 20	37	2.52	6.0	0.170	1.60	3.40
PM5022S-101M-RC	100	± 20	40	0.796	4.6	0.270	1.30	2.60
PM5022S-151M-RC	150	± 20	39	0.796	4.3	0.400	1.05	2.30
PM5022S-221M-RC	220	± 20	29	0.796	3.5	0.510	1.00	1.90
PM5022S-331M-RC	330	± 20	30	0.796	3.0	0.790	0.80	1.40
PM5022S-471M-RC	470	± 20	27	0.796	2.4	1.000	0.64	1.30
PM5022S-681M-RC	680	± 20	19	0.796	2.1	1.470	0.54	1.10
PM5022S-102M-RC	1000	± 20	46	0.796	1.5	2.160	0.45	0.90

### Soldering Profile



### Electrical Schematic



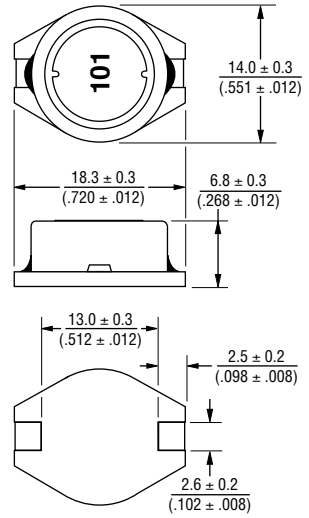
### General Specifications

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 .. -45 °C to +125 °C  
 Resistance to Soldering Heat ..... 250 °C, 10 sec. max.  
 Moisture Sensitivity Level..... 1  
 ESD Classification (HBM)..... N/A

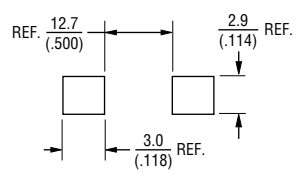
### Materials

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

### Product Dimensions



### Recommended Layout



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



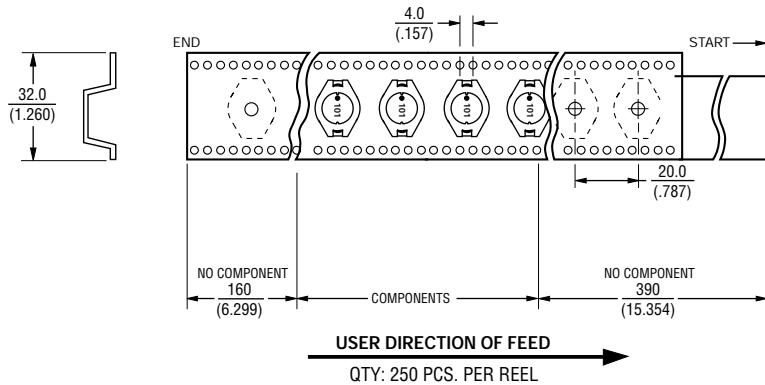
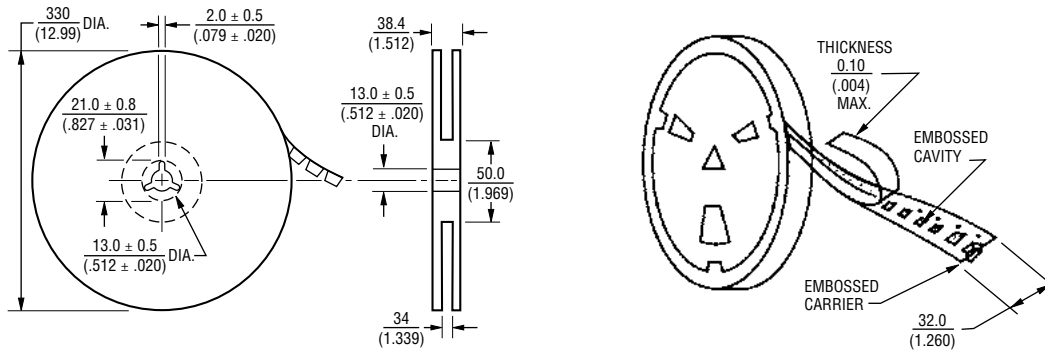
**WARNING Cancer and Reproductive Harm** [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\* RoHS Directive 2015/863, Mar 31, 2015 and Annex. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at [www.bourns.com/docs/legal/disclaimer.pdf](http://www.bourns.com/docs/legal/disclaimer.pdf).

# PM5022S Series - Shielded Power Inductor

**BOURNS®**

## Packaging Specifications



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

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REV. 11/19

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Users should verify actual device performance in their specific applications.

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