



## Features

- Formerly J. W. Miller® model
- Available in E12 series
- Small design of only 9.8 mm maximum diameter
- RoHS compliant\*

## Applications

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

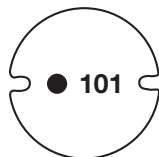
**BOURNS®**

## PM105 Series - SMD Power Inductor

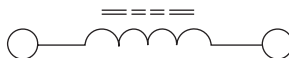
### Electrical Specifications

Bourns Part No.	Inductance 1 kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC (Ω)	I rms Max. (A)	I sat Typ. (A)
	(μH)	Tol. %						
PM105-100M-RC	10	± 20	30	2.52	21	0.060	2.60	5.10
PM105-120M-RC	12	± 20	30	2.52	20	0.070	2.45	4.50
PM105-150M-RC	15	± 20	30	2.52	16	0.080	2.25	4.00
PM105-180M-RC	18	± 20	30	2.52	15	0.090	2.15	3.80
PM105-220M-RC	22	± 20	25	2.52	13	0.10	1.95	3.50
PM105-270K-RC	27	± 10	25	2.52	11	0.11	1.75	3.40
PM105-330K-RC	33	± 10	25	2.52	10	0.12	1.50	2.90
PM105-390K-RC	39	± 10	20	2.52	9.0	0.14	1.35	2.60
PM105-470K-RC	47	± 10	20	2.52	8.0	0.17	1.25	2.30
PM105-560K-RC	56	± 10	20	2.52	7.5	0.19	1.15	2.10
PM105-680K-RC	68	± 10	15	2.52	7.0	0.22	1.10	2.00
PM105-820K-RC	82	± 10	15	2.52	6.0	0.25	1.00	1.90
PM105-101K-RC	100	± 10	15	0.796	5.2	0.35	0.97	1.70
PM105-121K-RC	120	± 10	15	0.796	5.0	0.40	0.89	1.50
PM105-151K-RC	150	± 10	15	0.796	4.5	0.47	0.78	1.40
PM105-181K-RC	180	± 10	12	0.796	4.0	0.63	0.72	1.30
PM105-221K-RC	220	± 10	12	0.796	3.8	0.73	0.66	1.10
PM105-271K-RC	270	± 10	12	0.796	3.5	0.97	0.57	1.00
PM105-331K-RC	330	± 10	12	0.796	3.2	1.15	0.52	0.85
PM105-391K-RC	390	± 10	12	0.796	3.0	1.30	0.48	0.80
PM105-471K-RC	470	± 10	12	0.796	2.5	1.48	0.42	0.80
PM105-561K-RC	560	± 10	12	0.796	2.3	1.90	0.33	0.66
PM105-681K-RC	680	± 10	12	0.796	2.1	2.25	0.28	0.65
PM105-821K-RC	820	± 10	10	0.796	2.0	2.55	0.24	0.56

### Typical Part Marking



### Electrical Schematic



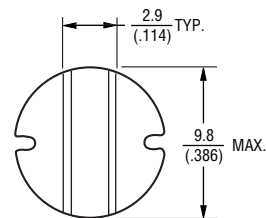
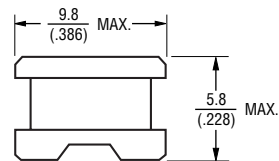
### General Specifications

Test Frequency ..... 1 KHz  
 Test Voltage ..... 1 V  
 Reflow Soldering .. 230 °C, 50 sec. max.  
 Operating Temperature  
 ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature .. -40 °C to +125 °C  
 Resistance to Soldering Heat  
 ..... 260 °C for 5 sec.

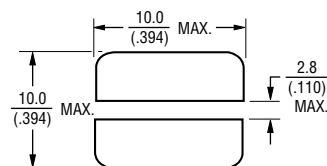
### Materials

Core ..... Ferrite DR core  
 Wire ..... Enameled copper wire  
 Terminal ..... Ag/Ni/Sn  
 Rated Current  
 ..... Ind. drop 10 % typ. at Isat  
 Temperature Rise  
 ..... 40°C max. at rated Irms  
 Packaging ..... 500 pcs. per reel

### Product Dimensions



### 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. Customers should verify actual device performance in their specific applications.

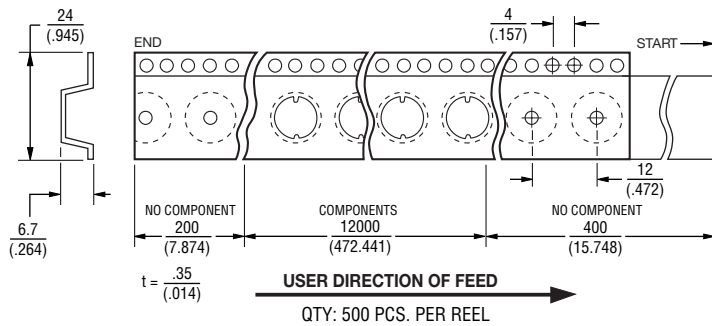
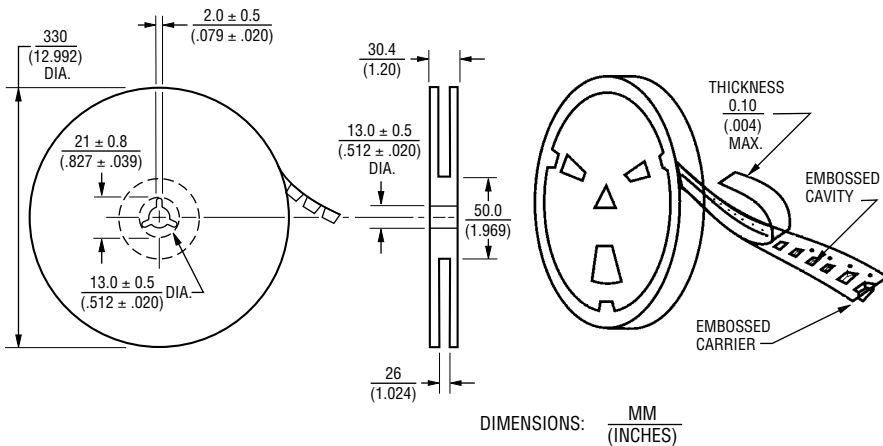
# PM105 Series - SMD Power Inductor

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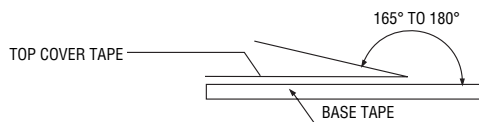
## Packaging Specifications

## Materials

Paper  
Plastics



## Strength of Cover Tape



The force for tearing off cover tape is 10 to 130 grams in the arrow direction.

REV. 05/12

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