



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

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

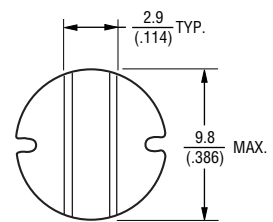
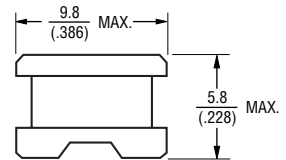
General Specifications

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.
 Moisture Sensitivity Level 2
 ESD Classification (HBM) N/A

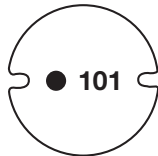
Materials

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 I rms
 Packaging 500 pcs. per reel

Product Dimensions



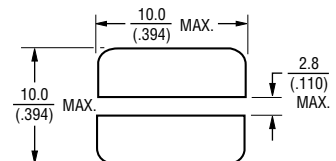
Typical Part Marking



Electrical Schematic



Recommended Layout



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

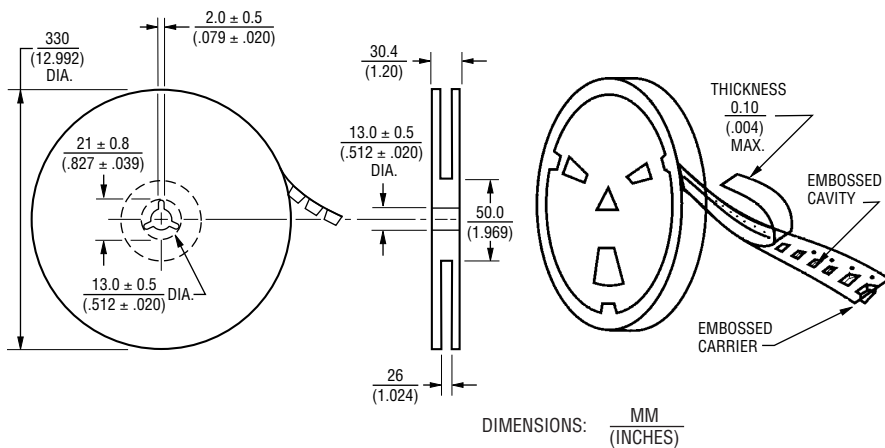
*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
 Specifications are subject to change without notice.

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.

PM105 Series - SMD Power Inductor

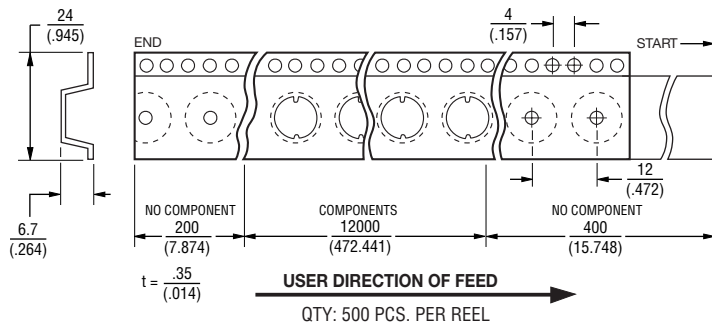
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Packaging Specifications

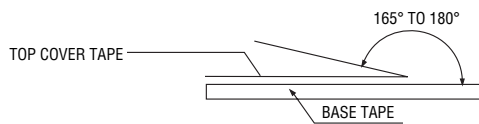


Materials

Paper
Plastics



Strength of Cover Tape



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

REV. 03/18

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