



## Features

- Formerly J. W. Miller® model
- Available in E12 series
- Small diameter of only 5.8 mm maximum
- Profile of 4.8 mm
- RoHS compliant\*

## Applications

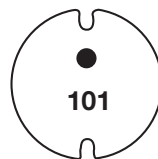
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs
  - Car radios

# PM54 Series - SMD Power Inductor

### Electrical Specifications

Bourns Part No.	Inductance 1 kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC (Ω)	I <sub>rms</sub> Max. (A)	I <sub>sat</sub> Typ. (A)
	(μH)	Tol. %						
PM54-100M-RC	10	± 20	30	2.52	23	0.10	1.45	2.00
PM54-120M-RC	12	± 20	30	2.52	22	0.12	1.40	1.90
PM54-150M-RC	15	± 20	30	2.52	20	0.14	1.30	1.60
PM54-180M-RC	18	± 20	30	2.52	18	0.15	1.25	1.50
PM54-220M-RC	22	± 20	30	2.52	16	0.19	1.10	1.40
PM54-270M-RC	27	± 15	28	2.52	14	0.22	1.00	1.30
PM54-330L-RC	33	± 15	24	2.52	13	0.25	0.88	1.10
PM54-390L-RC	39	± 15	24	2.52	13	0.32	0.80	1.00
PM54-470L-RC	47	± 15	22	2.52	12	0.37	0.72	1.00
PM54-560K-RC	56	± 10	22	2.52	11	0.42	0.68	0.90
PM54-680K-RC	68	± 10	22	2.52	10	0.52	0.62	0.84
PM54-820K-RC	82	± 10	20	2.52	9	0.60	0.58	0.75
PM54-101K-RC	100	± 10	20	0.796	9	0.70	0.52	0.68
PM54-121K-RC	120	± 10	22	0.796	7	0.93	0.48	0.60
PM54-151K-RC	150	± 10	20	0.796	6	1.10	0.40	0.54
PM54-181K-RC	180	± 10	20	0.796	6	1.38	0.38	0.50
PM54-221K-RC	220	± 10	20	0.796	6	1.57	0.35	0.44

### Typical Part Marking



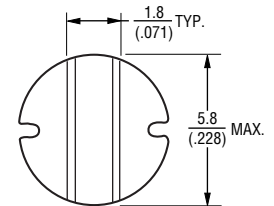
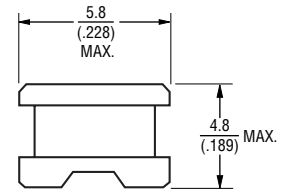
### General Specifications

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.

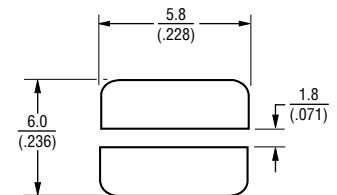
### Materials

Core ..... Ferrite DR core  
 Wire ..... Enameled copper  
 Terminal: ..... Ag/Ni/Sn  
 Rated Current  
 ..... Ind. drop 10 % typ. at I<sub>sat</sub>  
 Temperature Rise  
 ..... 40 °C max. at rated I<sub>rms</sub>  
 Packaging ..... 1500 pcs. per reel

### Product Dimensions



### Recommended Layout



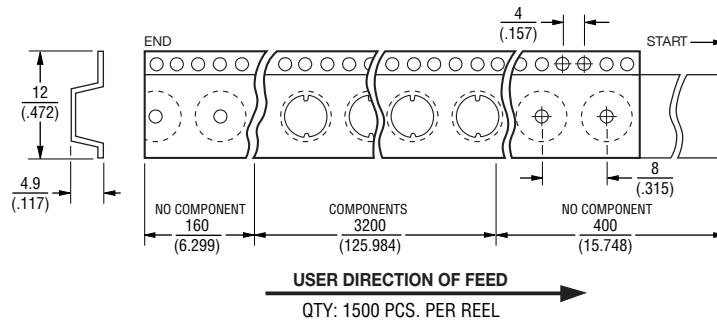
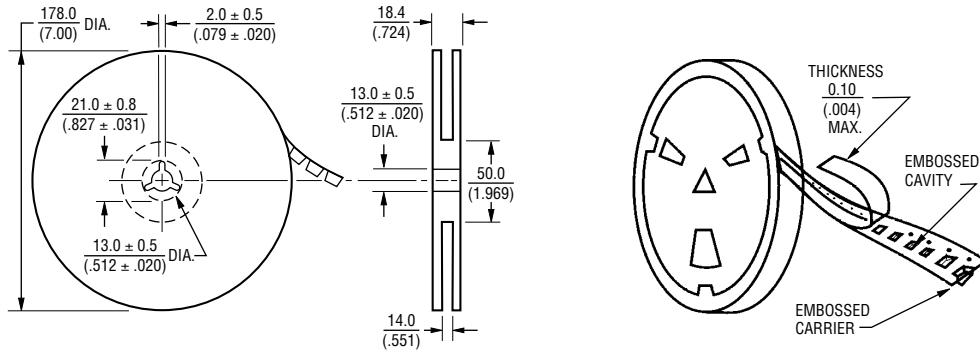
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

\*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.

# PM54 Series - SMD Power Inductor

**BOURNS®**

## Packaging Specifications



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

REV. 05/12

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