



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

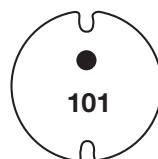
BOURNS®

PM54 Series - SMD Power Inductor

Electrical Specifications

Bourns Part No.	Inductance 1 kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC (Ω)	Irms Max. (A)	Isat 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



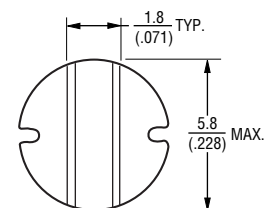
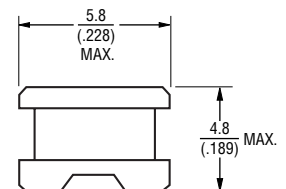
General Specifications

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.
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

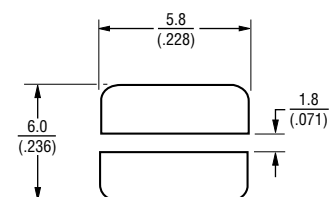
Materials

Core Ferrite DR core
 Wire Enameled copper
 Terminal: Ag/Ni/Sn
 Rated Current
 Ind. drop 10 % typ. at Isat
 Temp. Rise 40 °C max. at rated Irms
 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.

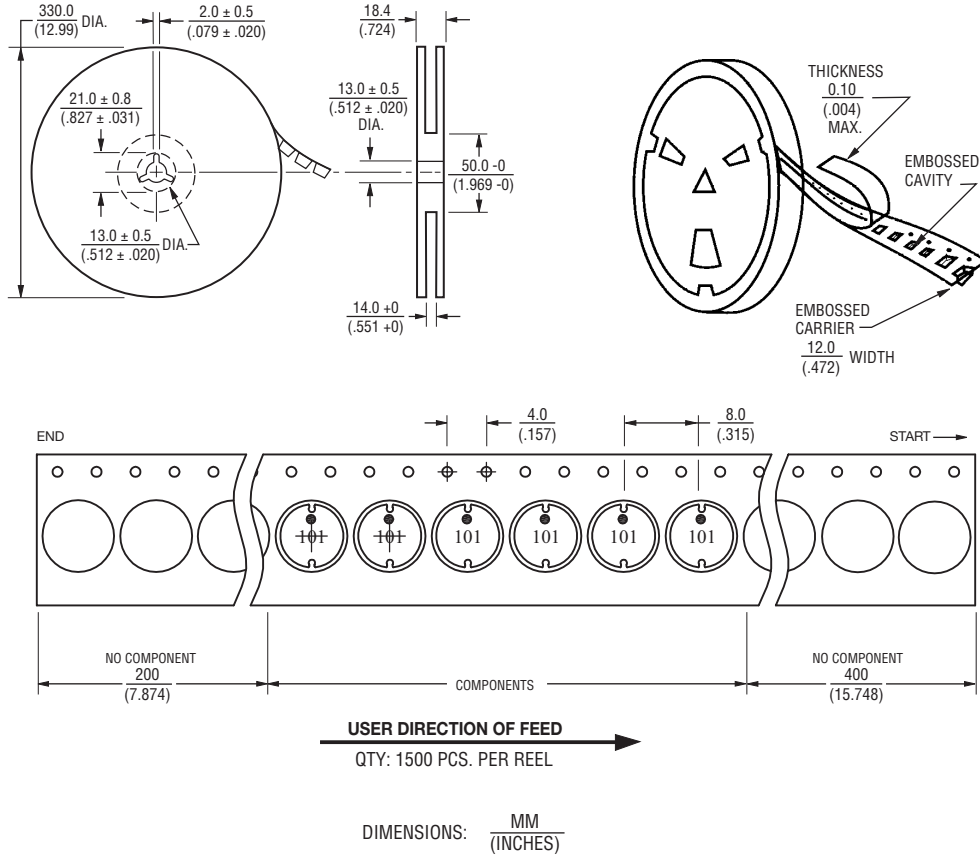
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

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Packaging Specifications



REV. 05/18

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