



## Features

- Formerly J. W. Miller® model
- Available in E12 values
- Inductance as low as 1.2  $\mu$ H
- Current rating to 6.6 amps
- RoHS compliant\*

## Applications

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

# PM127SH Series - Shielded SMD Power Inductors

## Electrical Specifications

Bourns Part No.	Inductance 100 kHz		Q Typ.	Test Frequency (MHz)	SRF Typ. (MHz)	RDC Max. (m $\Omega$ )	I rms Max. (A)	I sat Typ. (A)
	( $\mu$ H)	Tol. %						
PM127SH-1R2N-RC	1.2	-20 to +40	28	7.96	83	18.0	9.80	9.80
PM127SH-2R4N-RC	2.4	-20 to +40	20	7.96	45	10.0	9.20	10.50
PM127SH-3R5N-RC	3.5	-20 to +40	20	7.96	36	12.0	8.80	9.80
PM127SH-4R7N-RC	4.7	-20 to +40	22	7.96	30	15.5	8.20	8.80
PM127SH-6R1N-RC	6.1	-20 to +40	20	7.96	23	18.0	6.60	7.80
PM127SH-7R6N-RC	7.6	-20 to +40	15	7.96	21	20.0	5.90	6.50
PM127SH-100M-RC	10.0	$\pm$ 20	24	2.52	17	19.5	6.00	6.30
PM127SH-120M-RC	12.0	$\pm$ 20	26	2.52	15	28.0	5.60	6.60
PM127SH-150M-RC	15.0	$\pm$ 20	26	2.52	13	28.5	5.20	5.00
PM127SH-180M-RC	18.0	$\pm$ 20	24	2.52	12	35.0	4.80	4.60
PM127SH-220M-RC	22.0	$\pm$ 20	20	2.52	11	38.6	4.30	4.10
PM127SH-270M-RC	27.0	$\pm$ 20	26	2.52	10	52.0	3.90	3.70
PM127SH-330M-RC	33.0	$\pm$ 20	28	2.52	9.5	57.0	3.50	3.30
PM127SH-390M-RC	39.0	$\pm$ 20	24	2.52	8.5	70.0	3.20	3.10
PM127SH-470M-RC	47.0	$\pm$ 20	24	2.52	7.5	80.0	2.90	2.80
PM127SH-560M-RC	56.0	$\pm$ 20	24	2.52	7.0	100.0	2.60	2.50
PM127SH-680M-RC	68.0	$\pm$ 20	20	2.52	6.5	120.0	2.40	2.30
PM127SH-820M-RC	82.0	$\pm$ 20	20	0.796	5.0	130.0	2.30	2.20
PM127SH-101M-RC	100.0	$\pm$ 20	18	0.796	4.5	150.0	2.10	2.00
PM127SH-121M-RC	120.0	$\pm$ 20	16	0.796	4.3	200.0	1.95	1.95
PM127SH-151M-RC	150.0	$\pm$ 20	24	0.796	4.1	270.0	1.85	1.90
PM127SH-181M-RC	180.0	$\pm$ 20	24	0.796	4.0	300.0	1.75	1.88
PM127SH-221M-RC	220.0	$\pm$ 20	24	0.796	3.4	400.0	1.60	1.70
PM127SH-271M-RC	270.0	$\pm$ 20	20	0.796	3.1	450.0	1.20	1.60
PM127SH-331M-RC	330.0	$\pm$ 20	18	0.796	2.9	600.0	1.10	1.40
PM127SH-391M-RC	390.0	$\pm$ 20	20	0.796	2.7	680.0	1.60	1.40
PM127SH-471M-RC	470.0	$\pm$ 20	20	0.796	2.2	880.0	0.90	1.25
PM127SH-561M-RC	560.0	$\pm$ 20	20	0.796	2.0	960.0	0.80	1.15
PM127SH-681M-RC	680.0	$\pm$ 20	26	0.796	1.7	1300.0	0.75	0.97
PM127SH-821M-RC	820.0	$\pm$ 20	20	0.796	1.4	1500.0	0.70	0.94
PM127SH-102M-RC	1000.0	$\pm$ 20	40	0.252	1.3	1700.0	0.68	0.80

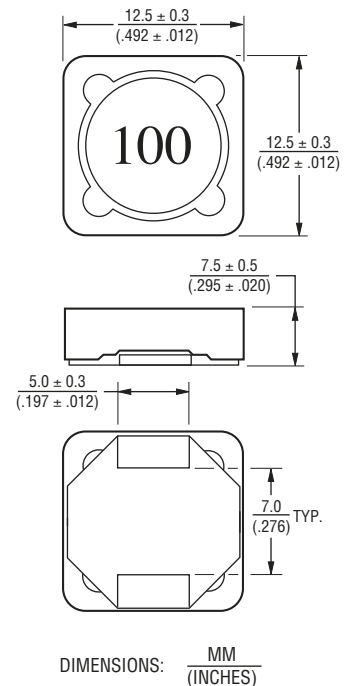
## General Specifications

Test Voltage ..... 0.1 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 10 sec.  
 Moisture Sensitivity Level ..... 2  
 ESD Classification (HBM) ..... N/A

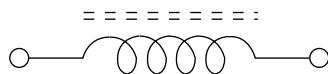
## Materials

Core ..... Ferrite DR and RI  
 Wire ..... Enamelled copper wire 130  
 Terminal ..... Cu/Ni/Sn  
 Rated Current  
 ..... Ind. drop 25 % typ. at Isat  
 Temperature Rise ..... 40 °C max.  
 at rated Irms  
 Packaging ..... 400 pcs. per reel

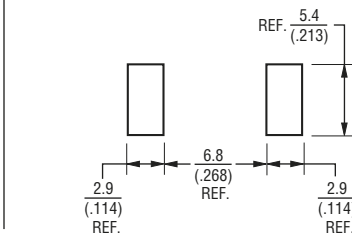
## Product Dimensions



## Electrical Schematic



## Recommended Layout



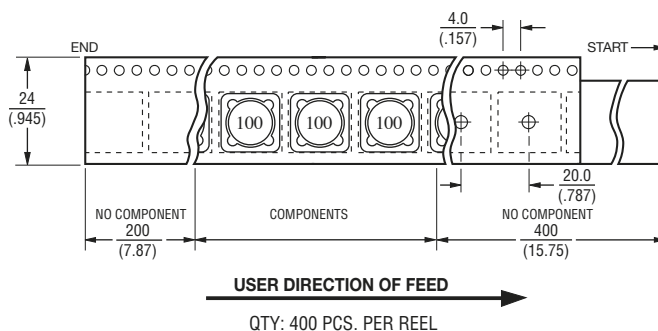
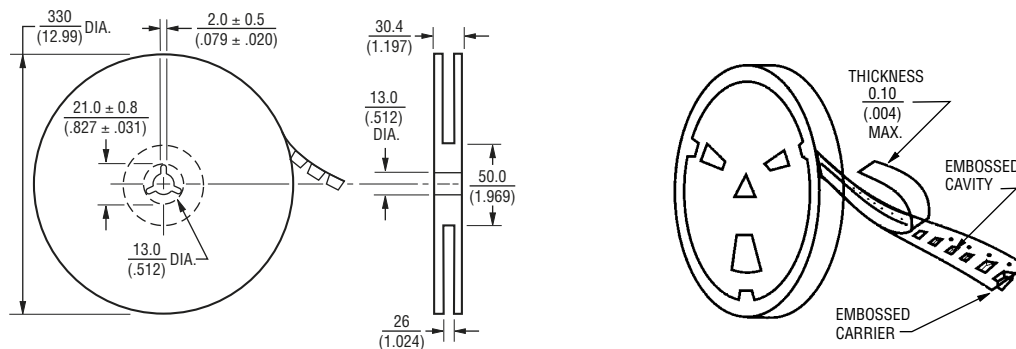
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*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. 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).

# PM127SH Series - Shielded SMD Power Inductors

**BOURNS®**

## Packaging Specifications



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

**BOURNS®**

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REV. 03/18

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Users should verify actual device performance in their specific applications.

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