



**THE DATASHEET OF  
PM127SH-2R4N-RC**





## Features

- Formerly J. W. Miller® model
- Available in E12 values
- Inductance as low as 1.2  $\mu\text{H}$
- 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)
	( $\mu\text{H}$ )	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

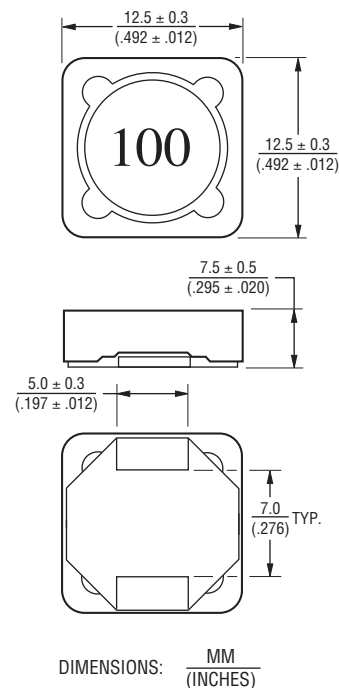
## General Specifications

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

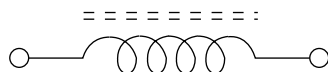
## Materials

Core ..... Ferrite DR and RI  
 Wire ..... Enameled 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

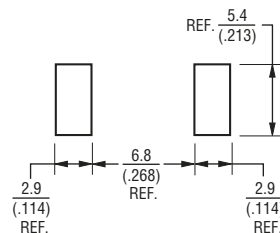
## Product Dimensions



## Electrical Schematic



## Recommended Layout



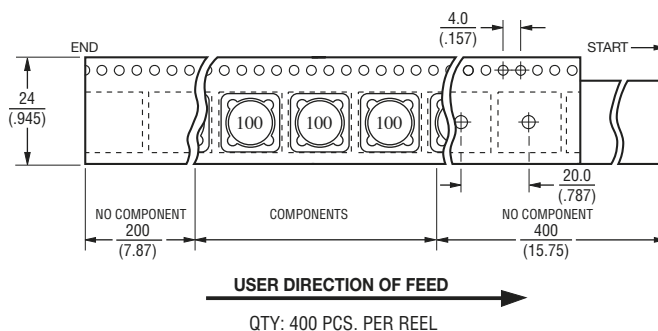
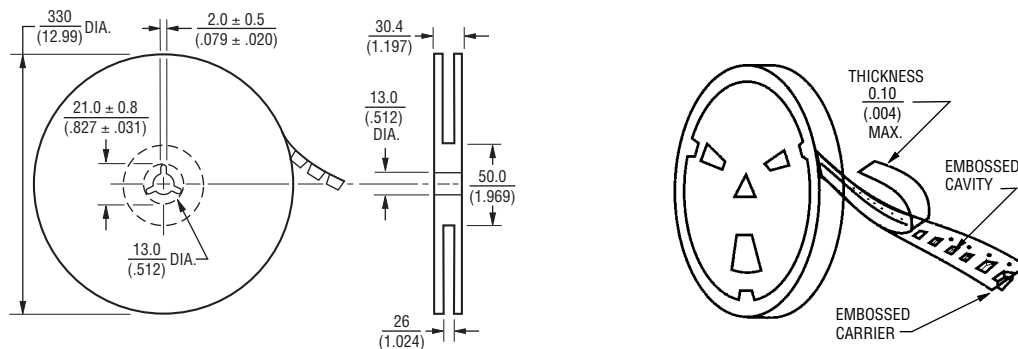
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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# 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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