



## Features

- Formerly J.W. Miller® model
- Available in E12 series
- Inductance as low as 1.0  $\mu$ H
- Current rating up to 9.4 A
- RoHS compliant\*

## Applications

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

# PM125SH Series - Shielded SMD Power Inductor

## 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. %						
PM125SH-100M-RC	10	$\pm 20$	32	2.52	21.00	20.0	5.50	5.50
PM125SH-120M-RC	12	$\pm 20$	27	2.52	19.40	23.0	5.20	5.00
PM125SH-150M-RC	15	$\pm 20$	25	2.52	17.60	27.0	5.00	4.60
PM125SH-180M-RC	18	$\pm 20$	28	2.52	15.50	36.0	4.20	3.90
PM125SH-220M-RC	22	$\pm 20$	29	2.52	13.40	43.0	4.00	3.70
PM125SH-270M-RC	27	$\pm 20$	26	2.52	12.70	45.0	3.60	3.30
PM125SH-330M-RC	33	$\pm 20$	27	2.52	9.97	60.0	3.00	2.80
PM125SH-390M-RC	39	$\pm 20$	22	2.52	10.40	70.0	2.80	2.70
PM125SH-470M-RC	47	$\pm 20$	22	2.52	7.63	86.0	2.60	2.50
PM125SH-560M-RC	56	$\pm 20$	24	2.52	7.92	100.0	2.30	2.20
PM125SH-680M-RC	68	$\pm 20$	22	2.52	7.43	110.0	2.10	2.10
PM125SH-820M-RC	82	$\pm 20$	25	2.52	6.85	145.0	1.95	1.90
PM125SH-101M-RC	100	$\pm 20$	26	0.796	6.07	180.0	1.70	1.70
PM125SH-121K-RC	120	$\pm 10$	26	0.796	5.50	210.0	1.65	1.65
PM125SH-151K-RC	150	$\pm 10$	20	0.796	5.00	260.0	1.55	1.55
PM125SH-181K-RC	180	$\pm 10$	26	0.796	4.50	320.0	1.40	1.40
PM125SH-221K-RC	220	$\pm 10$	22	0.796	4.20	380.0	1.38	1.30
PM125SH-271K-RC	270	$\pm 10$	20	0.796	3.60	450.0	1.30	1.20
PM125SH-331K-RC	330	$\pm 10$	22	0.796	3.20	580.0	1.15	1.10
PM125SH-391K-RC	390	$\pm 10$	20	0.796	2.80	700.0	1.08	1.00
PM125SH-471K-RC	470	$\pm 10$	18	0.796	2.60	820.0	0.95	0.90
PM125SH-561K-RC	560	$\pm 10$	22	0.796	2.40	1000.0	0.88	0.80
PM125SH-681K-RC	680	$\pm 10$	18	0.796	2.20	1150.0	0.80	0.75
PM125SH-821K-RC	820	$\pm 10$	20	0.796	2.00	1500.0	0.73	0.63
PM125SH-102K-RC	1000	$\pm 10$	30	0.252	1.80	1700.0	0.68	0.60

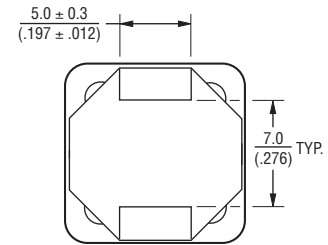
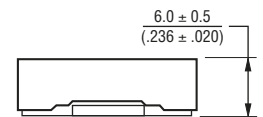
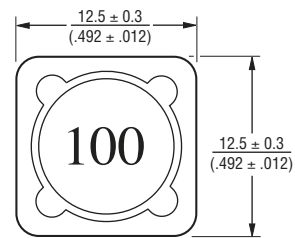
## General Specifications

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

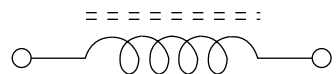
Core ..... Ferrite DR and RI  
 Wire ..... Enameled copper wire 130  
 Terminal ..... Cu/Ni/Sn  
 Rated Current  
 ..... Ind. drop 25 % typ. at Isat  
 Temperature Rise ..... 40 °C max.  
 at rated Irms  
 Packaging ..... 500 pcs. per reel

## Product Dimensions

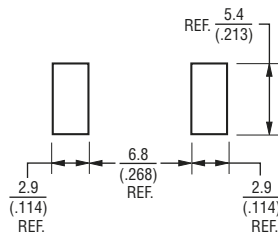


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

## Electrical Schematic



## Recommended Layout



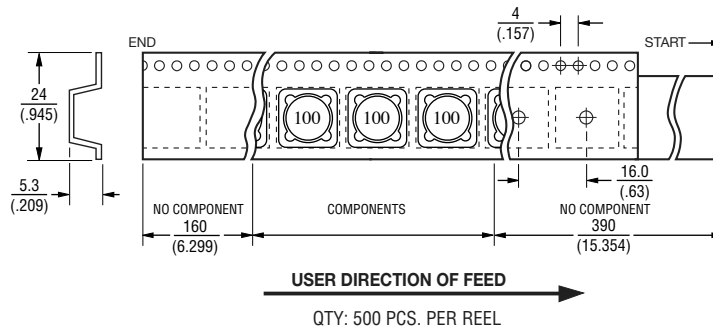
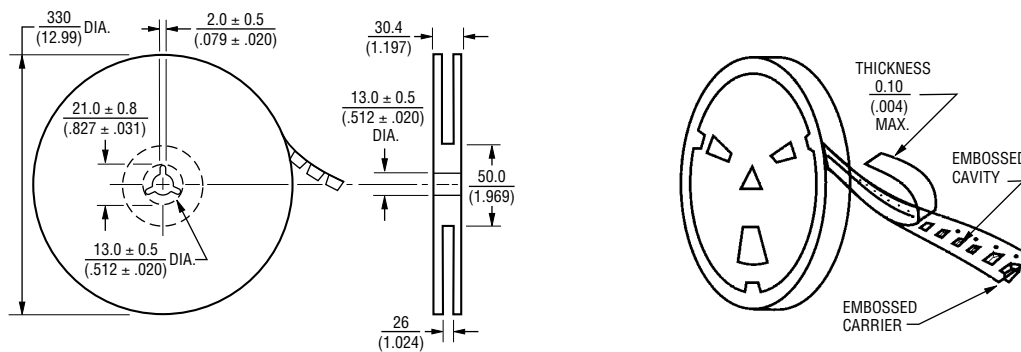
**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\* 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)

# PM125SH Series - Shielded SMD Power Inductor

# BOURNS®

## Packaging Specifications



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

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REV. 03/18

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