



## 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

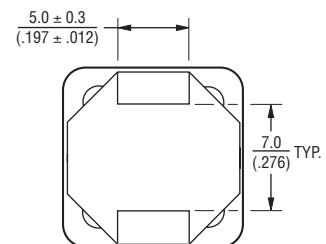
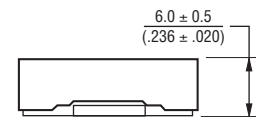
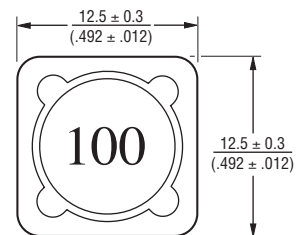
## General Specifications

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**

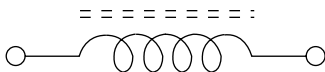
Core ..... Ferrite DR and RI  
 Wire ..... Enamelled copper wire 130  
 Terminal ..... Cu/Ni/Sn  
 Rated Current  
 ..... Ind. drop 25 % typ. at Isat  
 Temperature Rise ..... 40 °C max.  
 at rated I rms  
 Packaging ..... 500 pcs. per reel

## Product Dimensions

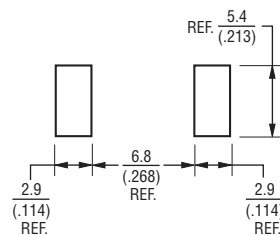


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

## Electrical Schematic



## Recommended Layout



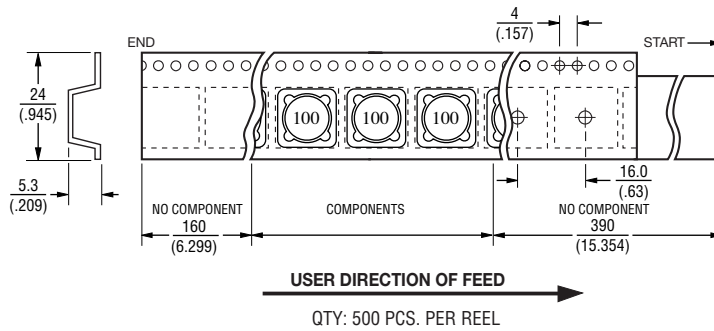
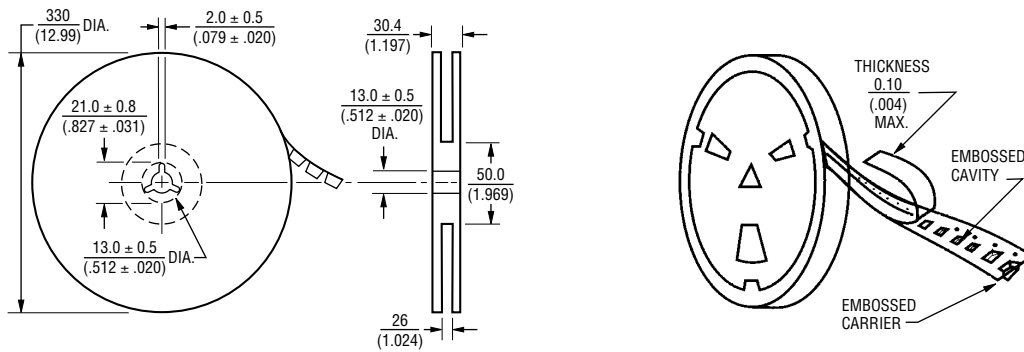
\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
 Specifications are subject to change without notice.

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.

# PM125SH Series - Shielded SMD Power Inductor

**BOURNS®**

## Packaging Specifications



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

REV. 03/18

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