
BOURNS®

## Features

- Formerly J.W. Miller® model
- Available in E12 series
- Inductance as low as 1.0 µH
- 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
  - Car radios

# PM125SH Series - Shielded SMD Power Inductor

### Electrical Specifications

| Bourns Part No. | Inductance 100 kHz (µH) | Inductance 100 kHz Tol. % | Q Typ. | Test Frequency (MHz) | SRF Typ. (MHz) | RDC Max. (mΩ) | I rms Max. (A) | I sat Typ. (A) |
|---|---|---|---|---|---|---|---|---|
| PM125SH-100M-RC | 10 | ± 20 | 32 | 2.52 | 21.00 | 20.0 | 5.50 | 5.50 |
| PM125SH-120M-RC | 12 | ± 20 | 27 | 2.52 | 19.40 | 23.0 | 5.20 | 5.00 |
| PM125SH-150M-RC | 15 | ± 20 | 25 | 2.52 | 17.60 | 27.0 | 5.00 | 4.60 |
| PM125SH-180M-RC | 18 | ± 20 | 28 | 2.52 | 15.50 | 36.0 | 4.20 | 3.90 |
| PM125SH-220M-RC | 22 | ± 20 | 29 | 2.52 | 13.40 | 43.0 | 4.00 | 3.70 |
| PM125SH-270M-RC | 27 | ± 20 | 26 | 2.52 | 12.70 | 45.0 | 3.60 | 3.30 |
| PM125SH-330M-RC | 33 | ± 20 | 27 | 2.52 | 9.97 | 60.0 | 3.00 | 2.80 |
| PM125SH-390M-RC | 39 | ± 20 | 22 | 2.52 | 10.40 | 70.0 | 2.80 | 2.70 |
| PM125SH-470M-RC | 47 | ± 20 | 22 | 2.52 | 7.63 | 86.0 | 2.60 | 2.50 |
| PM125SH-560M-RC | 56 | ± 20 | 24 | 2.52 | 7.92 | 100.0 | 2.30 | 2.20 |
| PM125SH-680M-RC | 68 | ± 20 | 22 | 2.52 | 7.43 | 110.0 | 2.10 | 2.10 |
| PM125SH-820M-RC | 82 | ± 20 | 25 | 2.52 | 6.85 | 145.0 | 1.95 | 1.90 |
| PM125SH-101M-RC | 100 | ± 20 | 26 | 0.796 | 6.07 | 180.0 | 1.70 | 1.70 |
| PM125SH-121K-RC | 120 | ± 10 | 26 | 0.796 | 5.50 | 210.0 | 1.65 | 1.65 |
| PM125SH-151K-RC | 150 | ± 10 | 20 | 0.796 | 5.00 | 260.0 | 1.55 | 1.55 |
| PM125SH-181K-RC | 180 | ± 10 | 26 | 0.796 | 4.50 | 320.0 | 1.40 | 1.40 |
| PM125SH-221K-RC | 220 | ± 10 | 22 | 0.796 | 4.20 | 380.0 | 1.38 | 1.30 |
| PM125SH-271K-RC | 270 | ± 10 | 20 | 0.796 | 3.60 | 450.0 | 1.30 | 1.20 |
| PM125SH-331K-RC | 330 | ± 10 | 22 | 0.796 | 3.20 | 580.0 | 1.15 | 1.10 |
| PM125SH-391K-RC | 390 | ± 10 | 20 | 0.796 | 2.80 | 700.0 | 1.08 | 1.00 |
| PM125SH-471K-RC | 470 | ± 10 | 18 | 0.796 | 2.60 | 820.0 | 0.95 | 0.90 |
| PM125SH-561K-RC | 560 | ± 10 | 22 | 0.796 | 2.40 | 1000.0 | 0.88 | 0.80 |
| PM125SH-681K-RC | 680 | ± 10 | 18 | 0.796 | 2.20 | 1150.0 | 0.80 | 0.75 |
| PM125SH-821K-RC | 820 | ± 10 | 20 | 0.796 | 2.00 | 1500.0 | 0.73 | 0.63 |
| PM125SH-102K-RC | 1000 | ± 10 | 30 | 0.252 | 1.80 | 1700.0 | 0.68 | 0.60 |

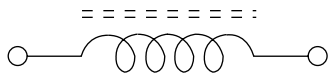
### General Specifications

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.

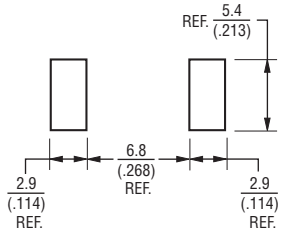
### Materials

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

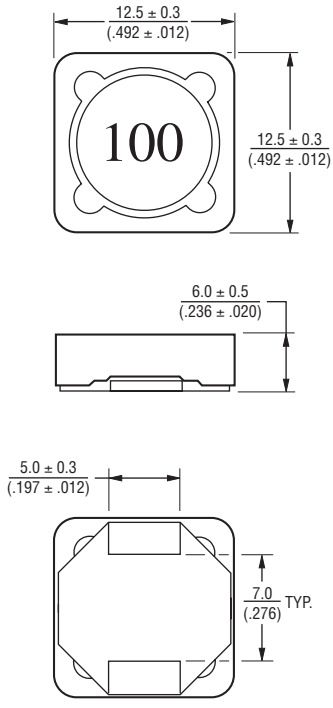
### Electrical Schematic



### Recommended Layout



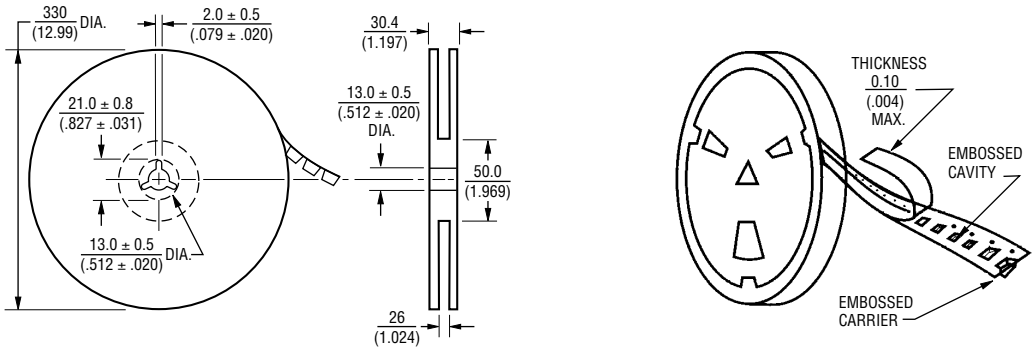

### Product Dimensions

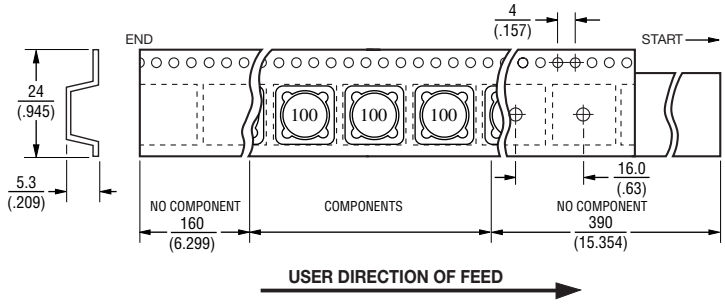



DIMENSIONS: MM (INCHES)

*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.
Customers should verify actual device performance in their specific applications.

## Packaging Specifications




QTY: 500 PCS. PER REEL

DIMENSIONS: MM / (INCHES)

REV. 05/11