



Features

- Formerly J. W. Miller® model
- Available in E12 values
- Inductance as low as 1.2 μ 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 Ω) | I rms Max. (A) | I sat Typ. (A) |
|-----------------|--------------------|------------|--------|----------------------|----------------|------------------------|----------------|----------------|
| | (μ 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 |

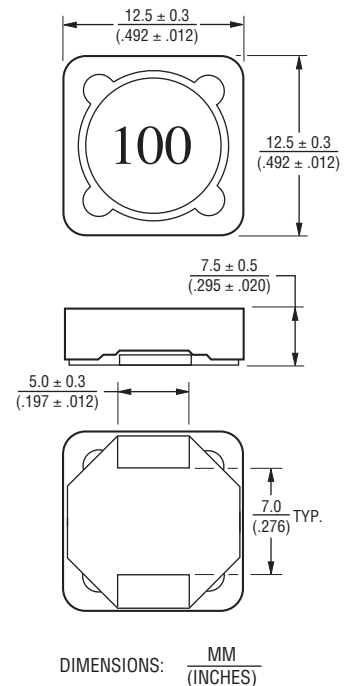
General Specifications

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

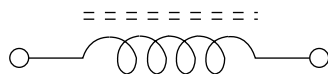
Materials

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

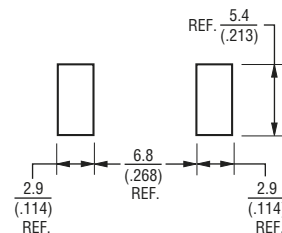
Product Dimensions



Electrical Schematic



Recommended Layout



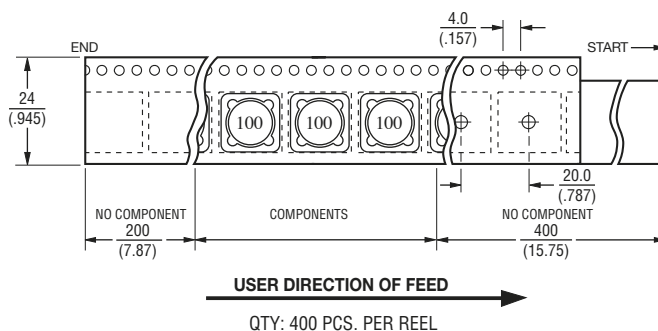
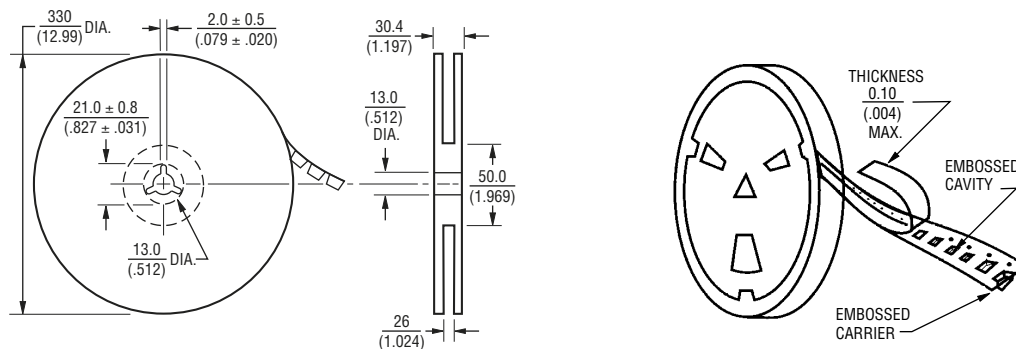
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*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.

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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