



Features

- Formerly J. W. Miller® model
- Available in E12 values
- Inductance as low as 1.2 μH
- 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) |
|-----------------|--------------------|------------|--------|----------------------|----------------|------------------------|----------------|----------------|
| | (μH) | 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 | ± 20 | 24 | 2.52 | 17 | 19.5 | 6.00 | 6.30 |
| PM127SH-120M-RC | 12.0 | ± 20 | 26 | 2.52 | 15 | 28.0 | 5.60 | 6.60 |
| PM127SH-150M-RC | 15.0 | ± 20 | 26 | 2.52 | 13 | 28.5 | 5.20 | 5.00 |
| PM127SH-180M-RC | 18.0 | ± 20 | 24 | 2.52 | 12 | 35.0 | 4.80 | 4.60 |
| PM127SH-220M-RC | 22.0 | ± 20 | 20 | 2.52 | 11 | 38.6 | 4.30 | 4.10 |
| PM127SH-270M-RC | 27.0 | ± 20 | 26 | 2.52 | 10 | 52.0 | 3.90 | 3.70 |
| PM127SH-330M-RC | 33.0 | ± 20 | 28 | 2.52 | 9.5 | 57.0 | 3.50 | 3.30 |
| PM127SH-390M-RC | 39.0 | ± 20 | 24 | 2.52 | 8.5 | 70.0 | 3.20 | 3.10 |
| PM127SH-470M-RC | 47.0 | ± 20 | 24 | 2.52 | 7.5 | 80.0 | 2.90 | 2.80 |
| PM127SH-560M-RC | 56.0 | ± 20 | 24 | 2.52 | 7.0 | 100.0 | 2.60 | 2.50 |
| PM127SH-680M-RC | 68.0 | ± 20 | 20 | 2.52 | 6.5 | 120.0 | 2.40 | 2.30 |
| PM127SH-820M-RC | 82.0 | ± 20 | 20 | 0.796 | 5.0 | 130.0 | 2.30 | 2.20 |
| PM127SH-101M-RC | 100.0 | ± 20 | 18 | 0.796 | 4.5 | 150.0 | 2.10 | 2.00 |
| PM127SH-121M-RC | 120.0 | ± 20 | 16 | 0.796 | 4.3 | 200.0 | 1.95 | 1.95 |
| PM127SH-151M-RC | 150.0 | ± 20 | 24 | 0.796 | 4.1 | 270.0 | 1.85 | 1.90 |
| PM127SH-181M-RC | 180.0 | ± 20 | 24 | 0.796 | 4.0 | 300.0 | 1.75 | 1.88 |
| PM127SH-221M-RC | 220.0 | ± 20 | 24 | 0.796 | 3.4 | 400.0 | 1.60 | 1.70 |
| PM127SH-271M-RC | 270.0 | ± 20 | 20 | 0.796 | 3.1 | 450.0 | 1.20 | 1.60 |
| PM127SH-331M-RC | 330.0 | ± 20 | 18 | 0.796 | 2.9 | 600.0 | 1.10 | 1.40 |
| PM127SH-391M-RC | 390.0 | ± 20 | 20 | 0.796 | 2.7 | 680.0 | 1.60 | 1.40 |
| PM127SH-471M-RC | 470.0 | ± 20 | 20 | 0.796 | 2.2 | 880.0 | 0.90 | 1.25 |
| PM127SH-561M-RC | 560.0 | ± 20 | 20 | 0.796 | 2.0 | 960.0 | 0.80 | 1.15 |
| PM127SH-681M-RC | 680.0 | ± 20 | 26 | 0.796 | 1.7 | 1300.0 | 0.75 | 0.97 |
| PM127SH-821M-RC | 820.0 | ± 20 | 20 | 0.796 | 1.4 | 1500.0 | 0.70 | 0.94 |
| PM127SH-102M-RC | 1000.0 | ± 20 | 40 | 0.252 | 1.3 | 1700.0 | 0.68 | 0.80 |

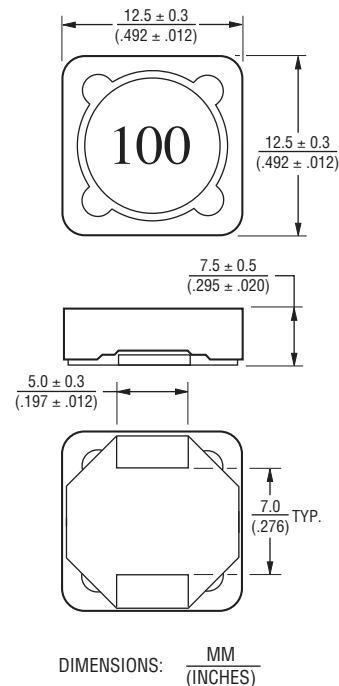
General Specifications

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

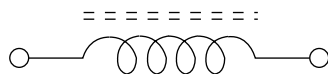
Materials

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

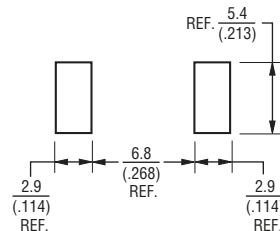
Product Dimensions



Electrical Schematic



Recommended Layout



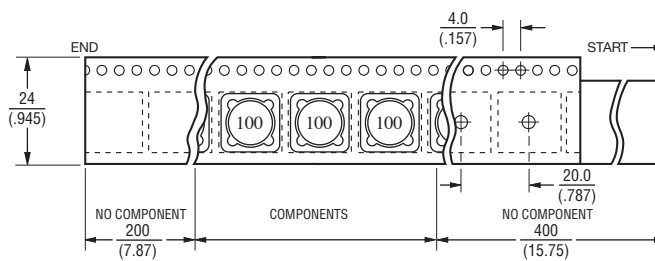
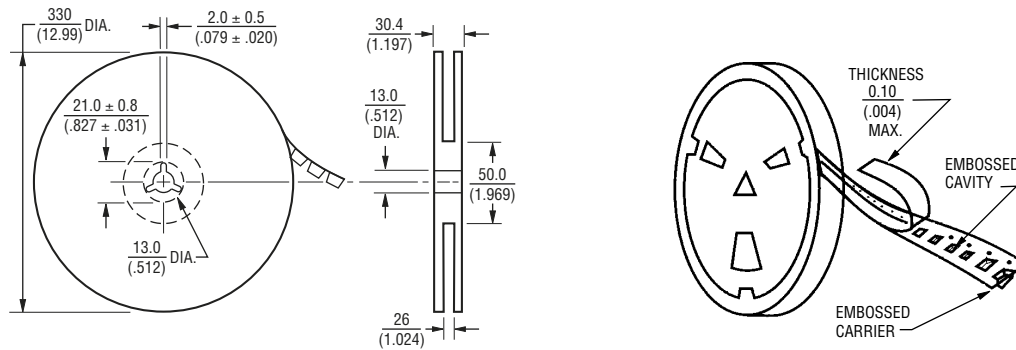
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
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PM127SH Series - Shielded SMD Power Inductors

BOURNS®

Packaging Specifications



USER DIRECTION OF FEED →

QTY: 400 PCS. PER REEL

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

BOURNS®

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REV. 03/18

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Users should verify actual device performance in their specific applications.

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