



## Features

- Formerly J. W. Miller® model
- Height of 3.0 mm max.
- Current rating up to 3.0 A
- RoHS compliant\*

## Applications

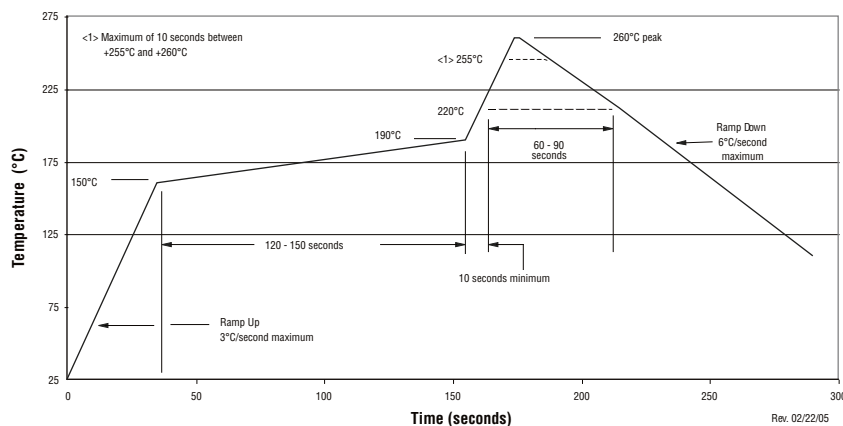
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

# PM628S Series - Shielded SMD Power Inductors

## Electrical Specifications

| Bourns Part No. | Inductance 100 kHz |        | Q Ref. | Test Frequency (MHz) | SRF Typ. (MHz) | DCR Max. (mΩ) | I rms (A) | I sat (A) |
|-----------------|--------------------|--------|--------|----------------------|----------------|---------------|-----------|-----------|
|                 | (μH)               | Tol. % |        |                      |                |               |           |           |
| PM628S-3R0-RC   | 3.0                | ±30    | 9      | 7.96                 | 45             | 28            | 3.00      | 2.60      |
| PM628S-3R9-RC   | 3.9                | ±30    | 9      | 7.96                 | 47             | 32            | 2.45      | 2.30      |
| PM628S-5R0-RC   | 5.0                | ±30    | 7.5    | 7.96                 | 50             | 36            | 2.40      | 2.10      |
| PM628S-6R0-RC   | 6.0                | ±30    | 9      | 7.96                 | 48             | 40            | 2.30      | 2.00      |
| PM628S-7R3-RC   | 7.3                | ±30    | 6      | 7.96                 | 38             | 52            | 2.20      | 1.85      |
| PM628S-8R6-RC   | 8.6                | ±30    | 8      | 2.52                 | 33             | 56            | 2.10      | 1.82      |
| PM628S-100-RC   | 10                 | ±30    | 11     | 2.52                 | 29             | 65            | 2.00      | 1.70      |
| PM628S-120-RC   | 12                 | ±30    | 10     | 2.52                 | 24             | 70            | 1.90      | 1.50      |
| PM628S-150-RC   | 15                 | ±30    | 9.5    | 2.52                 | 23             | 78            | 1.70      | 1.30      |
| PM628S-180-RC   | 18                 | ±30    | 9      | 2.52                 | 21             | 85            | 1.50      | 1.10      |
| PM628S-220-RC   | 22                 | ±30    | 8.5    | 2.52                 | 19             | 115           | 1.40      | 1.08      |
| PM628S-270-RC   | 27                 | ±30    | 9      | 2.52                 | 19             | 130           | 1.20      | 1.00      |
| PM628S-330-RC   | 33                 | ±30    | 10     | 2.52                 | 14             | 155           | 1.15      | 0.92      |
| PM628S-390-RC   | 39                 | ±30    | 10     | 2.52                 | 17             | 195           | 1.00      | 0.75      |
| PM628S-470-RC   | 47                 | ±30    | 10     | 2.52                 | 11             | 235           | 0.92      | 0.72      |
| PM628S-560-RC   | 56                 | ±30    | 10     | 0.796                | 15             | 260           | 0.85      | 0.65      |
| PM628S-680-RC   | 68                 | ±30    | 11     | 0.796                | 10.5           | 300           | 0.80      | 0.60      |
| PM628S-820-RC   | 82                 | ±30    | 9      | 0.796                | 14             | 400           | 0.70      | 0.56      |
| PM628S-101-RC   | 100                | ±30    | 8.5    | 0.796                | 7              | 500           | 0.58      | 0.55      |

## Soldering Profile



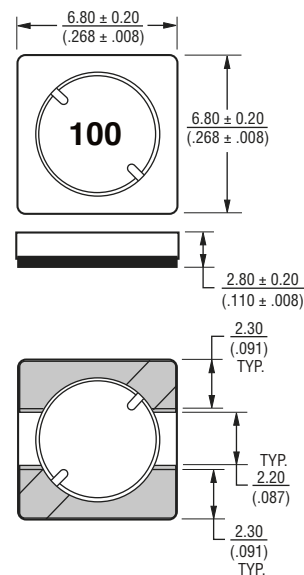
## General Specifications

Test Voltage ..... 0.1 V, 100 KHz  
 Reflow Soldering .... 230 °C; 50 sec max.  
 Operating Temp. .... -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

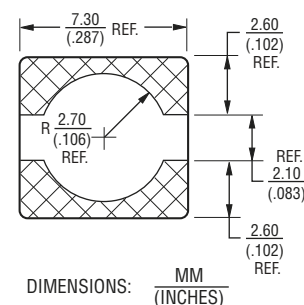
## Materials

Core Material ..... Ferrite  
 Wire ..... Enamelled Copper  
 Adhesive ..... Epoxy Resin  
 Terminal ..... Ag/Ni/Sn  
 Rated Current ..... Ind. drop of 35 % typ.  
 at Isat  
 Temperature Rise ..... 30 °C typ. at Irms  
 Packaging ..... 1500 pcs. per reel

## Product Dimensions



## Recommended Layout



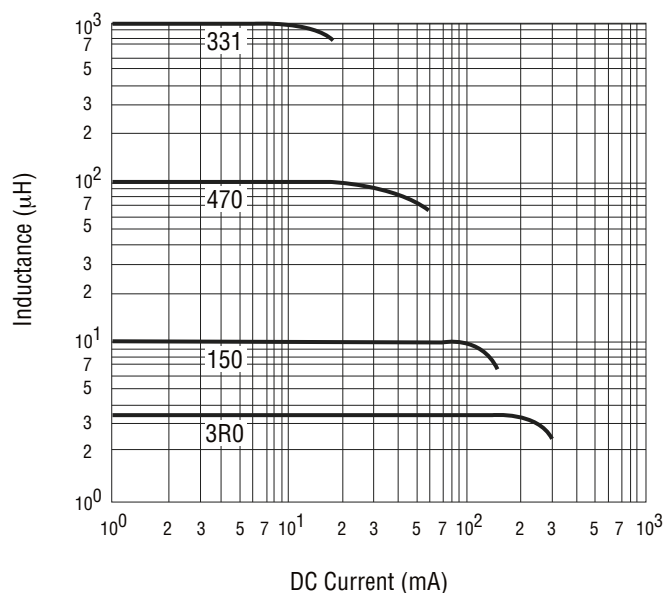
**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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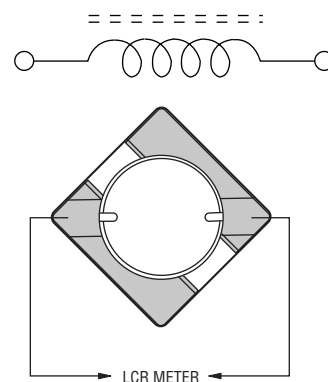
# PM628S Series - Shielded SMD Power Inductors

**BOURNS®**

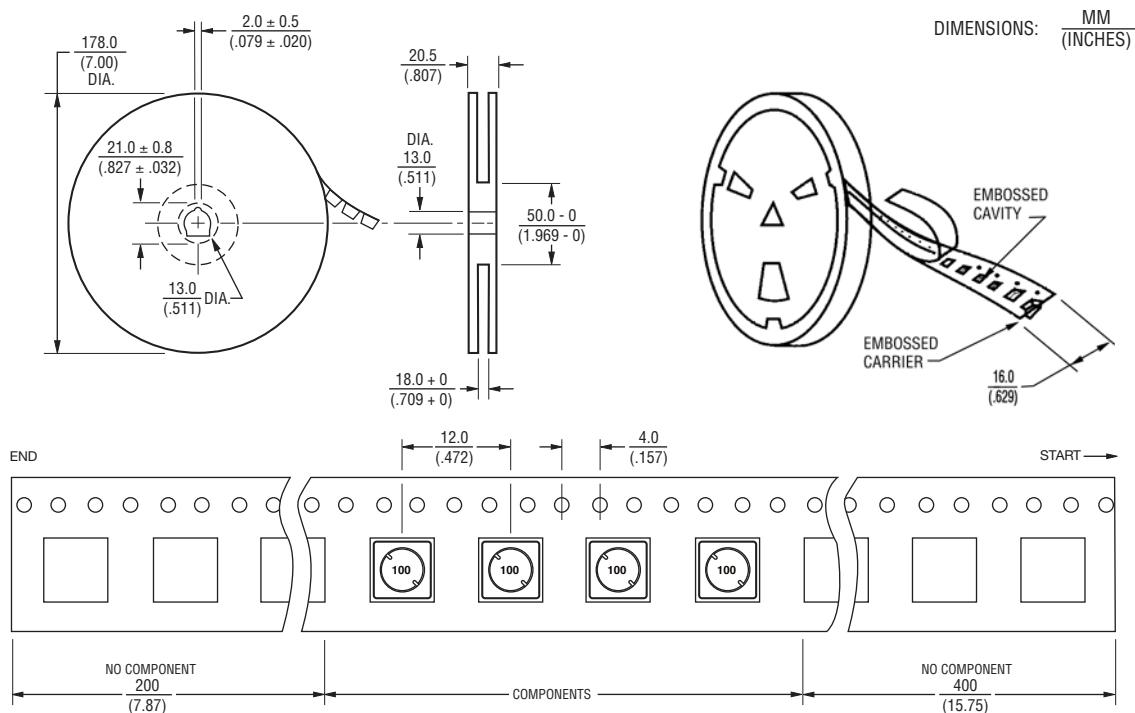
## Inductance vs. Current



## Electrical Schematic



## Packaging Specifications



USER DIRECTION OF FEED

QTY: 1500 PCS. PER REEL

REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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