



## Features

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

## Applications

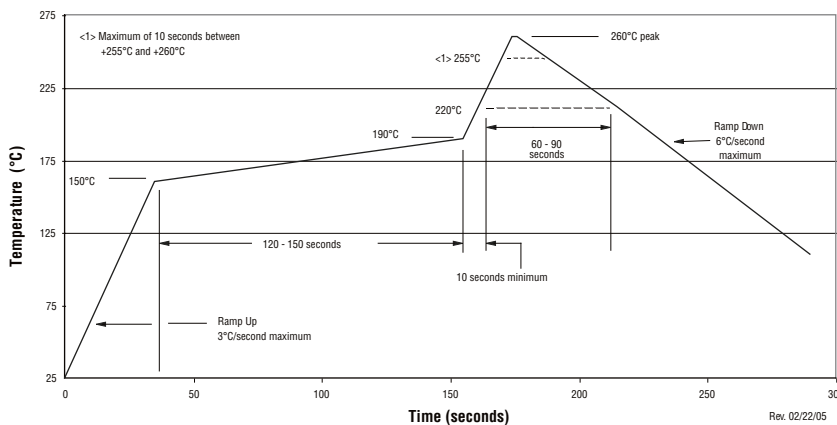
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

# PM528S Series - Shielded SMD Power Inductor

## Electrical Specifications

| Bourns Part No. | Inductance 100 kHz |        | Q Ref. | Test Frequency (MHz) | SRF Typ. (MHz) | DCR Max. (mΩ) | Irms (A) | Isat (A) |
|-----------------|--------------------|--------|--------|----------------------|----------------|---------------|----------|----------|
|                 | (μH)               | Tol. % |        |                      |                |               |          |          |
| PM528S-2R6-RC   | 2.6                | ±30    | 7      | 7.96                 | 77             | 30            | 3.00     | 2.70     |
| PM528S-3R0-RC   | 3.0                | ±30    | 7      | 7.96                 | 65             | 30            | 2.80     | 2.50     |
| PM528S-4R2-RC   | 4.2                | ±30    | 7      | 7.96                 | 51             | 35            | 2.50     | 2.20     |
| PM528S-5R3-RC   | 5.3                | ±30    | 7      | 7.96                 | 45             | 40            | 2.30     | 1.90     |
| PM528S-6R2-RC   | 6.2                | ±30    | 7      | 7.96                 | 39             | 45            | 2.20     | 1.80     |
| PM528S-8R2-RC   | 8.2                | ±30    | 7      | 7.96                 | 34             | 55            | 2.10     | 1.60     |
| PM528S-100-RC   | 10                 | ±30    | 9      | 2.52                 | 30             | 70            | 1.50     | 1.40     |
| PM528S-120-RC   | 12                 | ±30    | 11     | 2.52                 | 28             | 80            | 1.46     | 1.25     |
| PM528S-150-RC   | 15                 | ±30    | 9      | 2.52                 | 22             | 100           | 1.37     | 1.15     |
| PM528S-180-RC   | 18                 | ±30    | 10     | 2.52                 | 20             | 110           | 1.25     | 1.10     |
| PM528S-220-RC   | 22                 | ±30    | 7      | 2.52                 | 20             | 120           | 1.15     | 1.00     |
| PM528S-270-RC   | 27                 | ±30    | 10     | 2.52                 | 17             | 160           | 1.05     | 0.90     |
| PM528S-330-RC   | 33                 | ±30    | 11     | 2.52                 | 13             | 190           | 0.90     | 0.78     |
| PM528S-390-RC   | 39                 | ±30    | 8      | 2.52                 | 13             | 210           | 0.86     | 0.72     |
| PM528S-470-RC   | 47                 | ±30    | 7      | 2.52                 | 13             | 250           | 0.82     | 0.65     |
| PM528S-560-RC   | 56                 | ±30    | 9      | 2.52                 | 12             | 300           | 0.72     | 0.60     |
| PM528S-680-RC   | 68                 | ±30    | 8      | 2.52                 | 11             | 350           | 0.62     | 0.56     |
| PM528S-820-RC   | 82                 | ±30    | 8      | 2.52                 | 9              | 430           | 0.52     | 0.50     |
| PM528S-101-RC   | 100                | ±30    | 8      | 0.796                | 8              | 480           | 0.45     | 0.45     |

## Soldering Profile



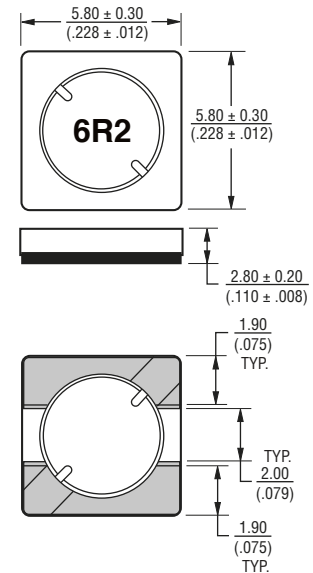
## General Specifications

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

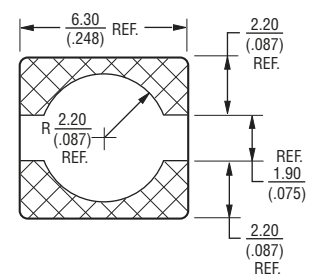
## Materials

Core Material ..... Ferrite  
 Wire ..... Enameled 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 ..... 400 pcs. per reel

## Product Dimensions



## Recommended Layout



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



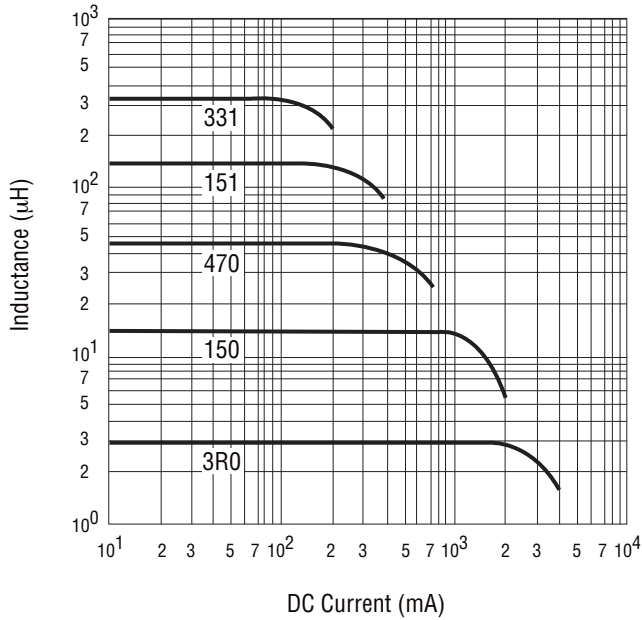
**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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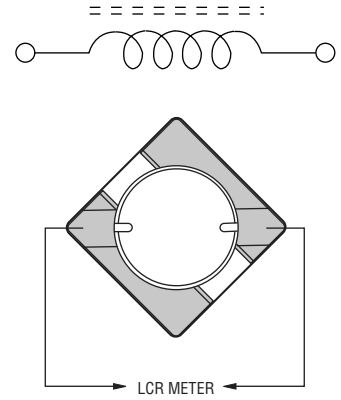
# PM528S Series - Shielded SMD Power Inductor

**BOURNS®**

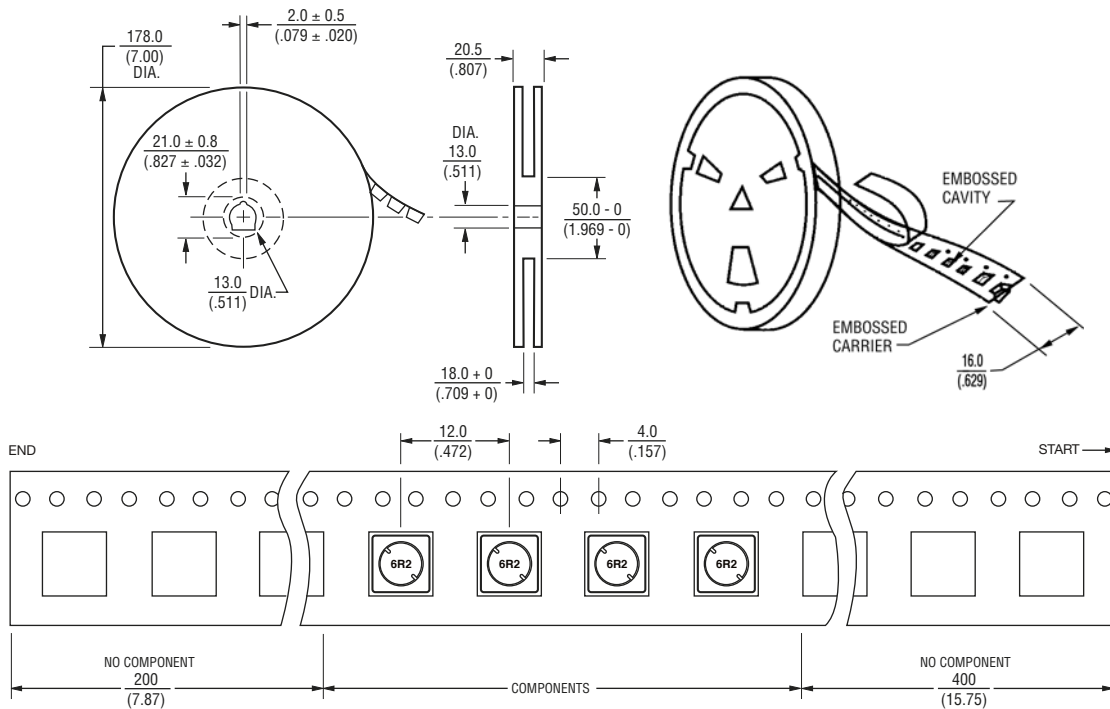
## Inductance vs. Current



## Electrical Schematic



## Packaging Specifications



USER DIRECTION OF FEED →  
QTY: 400 PCS. PER REEL

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

REV. 03/18

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Users should verify actual device performance in their specific applications.

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