

## Features

- Formerly J. W. Miller® model
- Available in E12 series
- Unit height of 5.2 mm
- Current up to 4.5 A
- RoHS compliant\*

## Applications

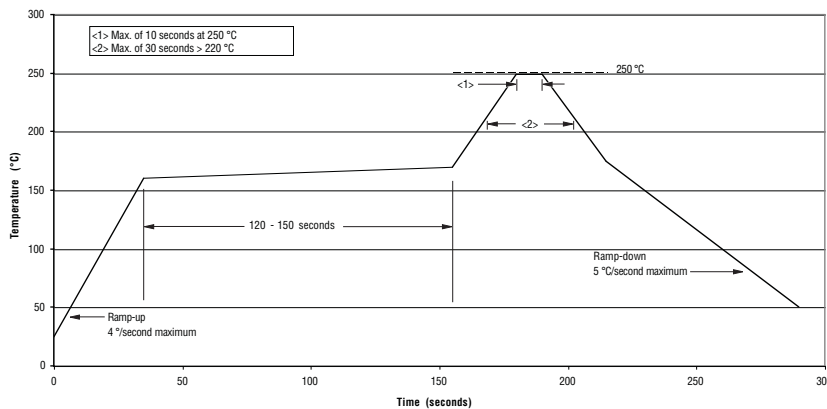
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs
  - Car radios

# PM3316S Series - Shielded Power Inductors

## Electrical Specifications

| Bourns Part No. | Inductance 1 kHz |        | Q Ref. | Test Frequency (MHz) | SRF Min. (MHz) | RDC (Ω) | I <sub>rms</sub> Max. (A) | I <sub>sat</sub> Typ. (A) |
|-----------------|------------------|--------|--------|----------------------|----------------|---------|---------------------------|---------------------------|
|                 | (μH)             | Tol. % |        |                      |                |         |                           |                           |
| PM3316S-1R0M-RC | 1.0              | ± 20   | 25     | 7.96M                | 120            | 0.017   | 4.50                      | 8.00                      |
| PM3316S-1R5M-RC | 1.5              | ± 20   | 25     | 7.96M                | 100            | 0.020   | 3.60                      | 7.00                      |
| PM3316S-2R2M-RC | 2.2              | ± 20   | 25     | 7.96M                | 90.0           | 0.027   | 3.10                      | 6.10                      |
| PM3316S-3R3M-RC | 3.3              | ± 20   | 25     | 7.96M                | 75.0           | 0.039   | 3.30                      | 3.90                      |
| PM3316S-4R7M-RC | 4.7              | ± 20   | 25     | 7.96M                | 50.0           | 0.040   | 2.50                      | 3.80                      |
| PM3316S-6R8M-RC | 6.8              | ± 20   | 22     | 7.96M                | 35.0           | 0.075   | 2.20                      | 2.80                      |
| PM3316S-100M-RC | 10               | ± 20   | 48     | 2.52M                | 30.0           | 0.065   | 2.00                      | 3.00                      |
| PM3316S-150M-RC | 15               | ± 20   | 40     | 2.52M                | 20.0           | 0.085   | 1.70                      | 2.10                      |
| PM3316S-220M-RC | 22               | ± 20   | 42     | 2.52M                | 18.0           | 0.100   | 1.40                      | 1.90                      |
| PM3316S-330M-RC | 33               | ± 20   | 40     | 2.52M                | 15.0           | 0.160   | 1.20                      | 1.56                      |
| PM3316S-470M-RC | 47               | ± 20   | 35     | 2.52M                | 12.0           | 0.190   | 1.00                      | 1.30                      |

## Soldering Profile



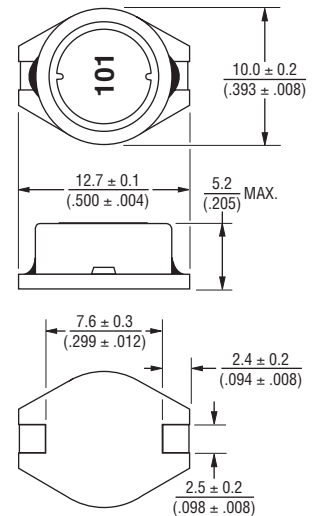
## General Specifications

Test Voltage ..... 1 V  
 Reflow soldering .... 250 °C; 10 sec max.  
 (In compliance with JEDEC, J-STD-020C, Table 4-2)  
 Operating Temperature ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature ..... -40 °C to +125 °C  
 Resistance to Soldering Heat ..... 250 °C, 10 sec. max.

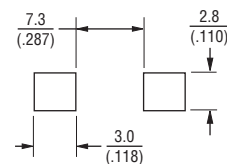
## Materials

Core ..... Ferrite DR and RI core  
 Wire ..... Enameled copper  
 Base ..... DAP  
 Terminal ..... Cu/Ni/Sn  
 Rated Current ..... Ind. drop 10 % typ. at I<sub>sat</sub>  
 Temperature Rise ..... 40 °C max. at rated I<sub>rms</sub>  
 Packaging ..... 500 pcs. per reel

## Product Dimensions



## Recommended Layout



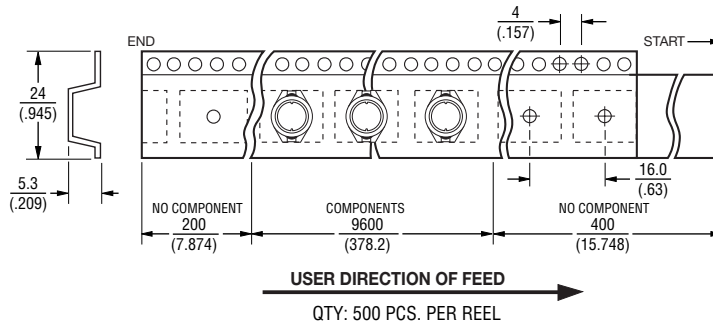
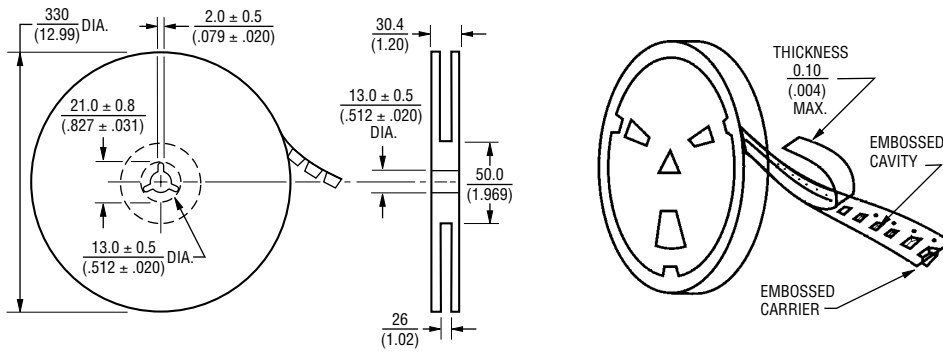
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

\*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..

# PM3316S Series - Shielded Power Inductors

**BOURNS®**

## Packaging Specifications



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

REV. 05/11

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