



### Features

- Formerly J. W. Miller® model
- Available in E6 series
- Low profile of only 5.0 mm
- Inductance as low as 1.0 µH
- RoHS compliant\*

### Applications

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

**BOURNS®**

## PM3316 Series - SMD Power Inductors

### Electrical Specifications

| Bourns Part No. | Inductance 1 kHz |        | Q Ref. | Test Frequency (MHz) | SRF Min. (MHz) | RDC (Ω) | I rms Max. (A) | I sat Typ. (A) |
|-----------------|------------------|--------|--------|----------------------|----------------|---------|----------------|----------------|
|                 | (µH)             | Tol. % |        |                      |                |         |                |                |
| PM3316-1R0M-RC  | 1                | ± 20   | 20     | 10                   | 137            | 0.007   | 7.50           | 9.00           |
| PM3316-1R5M-RC  | 1.5              | ± 20   | 50     | 3                    | 95             | 0.009   | 6.50           | 8.00           |
| PM3316-2R2M-RC  | 2.2              | ± 20   | 50     | 3                    | 65             | 0.012   | 6.10           | 7.00           |
| PM3316-3R3M-RC  | 3.3              | ± 20   | 50     | 4                    | 54             | 0.015   | 5.00           | 6.40           |
| PM3316-4R7M-RC  | 4.7              | ± 20   | 50     | 4                    | 42             | 0.019   | 4.50           | 5.40           |
| PM3316-6R8M-RC  | 6.8              | ± 20   | 50     | 3                    | 31             | 0.030   | 3.40           | 4.50           |
| PM3316-100M-RC  | 10               | ± 20   | 50     | 3                    | 26             | 0.050   | 2.90           | 3.70           |
| PM3316-150M-RC  | 15               | ± 20   | 50     | 3                    | 22             | 0.060   | 2.50           | 3.00           |
| PM3316-220M-RC  | 22               | ± 20   | 40     | 3                    | 18             | 0.10    | 2.00           | 2.50           |
| PM3316-330M-RC  | 33               | ± 20   | 25     | 1                    | 14             | 0.12    | 1.80           | 2.00           |
| PM3316-470M-RC  | 47               | ± 20   | 25     | 1                    | 12             | 0.19    | 1.40           | 1.60           |
| PM3316-680M-RC  | 68               | ± 20   | 25     | 1                    | 11             | 0.24    | 1.20           | 1.40           |
| PM3316-101M-RC  | 100              | ± 20   | 30     | 0.05                 | 8              | 0.33    | 1.00           | 1.20           |
| PM3316-151M-RC  | 150              | ± 20   | 30     | 0.05                 | 6              | 0.59    | 0.80           | 1.00           |
| PM3316-221M-RC  | 220              | ± 20   | 33     | 0.05                 | 5              | 0.78    | 0.70           | 0.80           |
| PM3316-331M-RC  | 330              | ± 20   | 33     | 0.05                 | 4              | 1.15    | 0.55           | 0.60           |
| PM3316-471M-RC  | 470              | ± 20   | 57     | 0.05                 | 4              | 1.70    | 0.45           | 0.50           |
| PM3316-681M-RC  | 680              | ± 20   | 57     | 0.05                 | 3              | 2.60    | 0.35           | 0.40           |
| PM3316-102M-RC  | 1000             | ± 20   | 81     | 0.07                 | 2              | 3.90    | 0.30           | 0.35           |

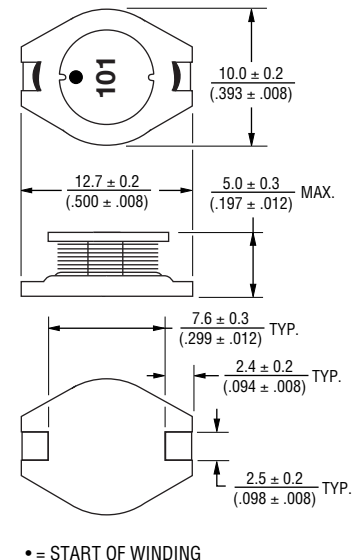
### General Specifications

Test Voltage ..... 0.1 V  
 Reflow soldering .... 250 °C; 10 sec max.  
 (In compliance with JEDEC, J-STD-020C, Table 4-2)  
 Operating Temperature ..... -55 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature ..... -55 °C to +125 °C  
 Resistance to Soldering Heat ..... 250 °C, 10 sec. max.

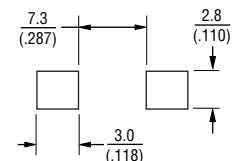
### Materials

Core ..... Ferrite DR  
 Wire ..... Enameled copper  
 Base ..... DAP  
 Terminal ..... Cu/Sn  
 Rated Current ..... Ind. drop 10 % typ. at Isat  
 Temperature Rise ..... 15 °C max. at rated I rms  
 Packaging ..... 500 pcs. per reel

### Product Dimensions



### Recommended Layout



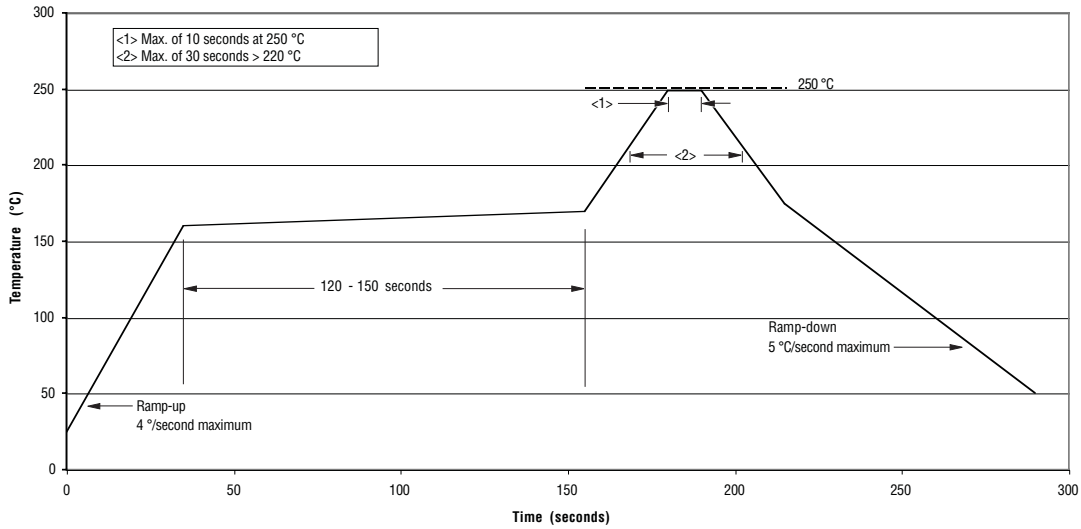
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

\*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..

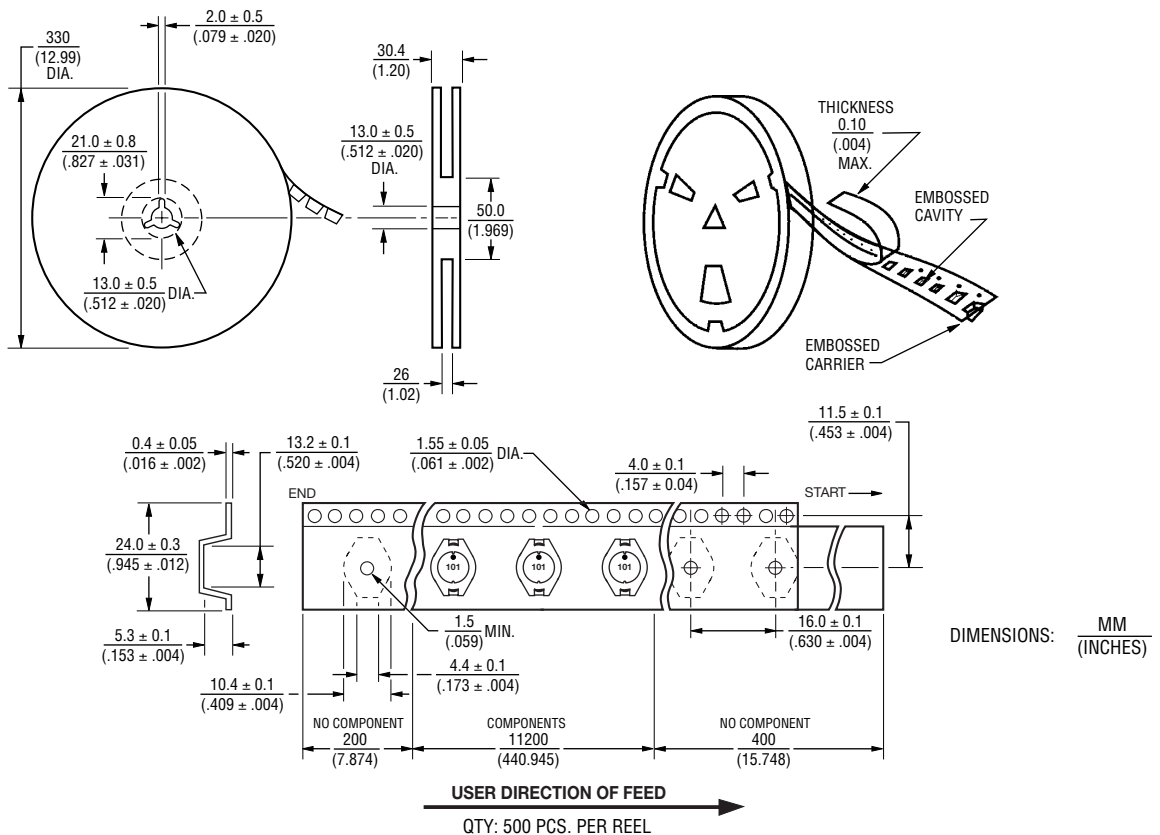
# PM3316 Series - SMD Power Inductors

**BOURNS®**

## Soldering Profile



## Packaging Specifications



REV. 06/10

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