



## Features

- Formerly J.W. Miller® model
- Available in E12 series
- Low profile of only 3.2 mm
- Low inductance values
- RoHS compliant\*

## Applications

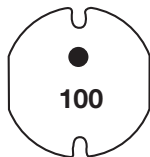
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs
  - Car radios

# PM43 Series - SMD Power Inductor

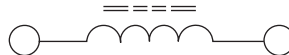
## Electrical Specifications

| 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. % |        |                      |                |         |                |                |
| PM43-1R0M-RC    | 1.0              | ± 20   | 28     | 7.96                 | 150            | 0.033   | 3.80           | 5.50           |
| PM43-1R4M-RC    | 1.4              | ± 20   | 28     | 7.96                 | 110            | 0.038   | 3.30           | 5.10           |
| PM43-1R8M-RC    | 1.8              | ± 20   | 28     | 7.96                 | 90             | 0.042   | 2.91           | 4.40           |
| PM43-2R2M-RC    | 2.2              | ± 20   | 28     | 7.96                 | 80             | 0.047   | 2.60           | 3.90           |
| PM43-2R7M-RC    | 2.7              | ± 20   | 28     | 7.96                 | 75             | 0.052   | 2.43           | 3.50           |
| PM43-3R3M-RC    | 3.3              | ± 20   | 28     | 7.96                 | 65             | 0.058   | 2.15           | 3.00           |
| PM43-3R9M-RC    | 3.9              | ± 20   | 28     | 7.96                 | 55             | 0.076   | 1.98           | 2.70           |
| PM43-4R7M-RC    | 4.7              | ± 20   | 28     | 7.96                 | 50             | 0.094   | 1.70           | 2.60           |
| PM43-5R6M-RC    | 5.6              | ± 20   | 28     | 7.96                 | 45             | 0.10    | 1.60           | 2.40           |
| PM43-6R8M-RC    | 6.8              | ± 20   | 28     | 7.96                 | 40             | 0.12    | 1.41           | 2.10           |
| PM43-8R2M-RC    | 8.2              | ± 20   | 28     | 7.96                 | 36             | 0.13    | 1.26           | 1.90           |
| PM43-100M-RC    | 10               | ± 20   | 28     | 2.52                 | 33             | 0.18    | 1.15           | 1.70           |
| PM43-120M-RC    | 12               | ± 20   | 28     | 2.52                 | 30             | 0.21    | 1.05           | 1.60           |
| PM43-150M-RC    | 15               | ± 20   | 28     | 2.52                 | 28             | 0.24    | 0.92           | 1.40           |
| PM43-180M-RC    | 18               | ± 20   | 25     | 2.52                 | 23             | 0.34    | 0.84           | 1.30           |
| PM43-220M-RC    | 22               | ± 20   | 25     | 2.52                 | 20             | 0.38    | 0.76           | 1.20           |
| PM43-270K-RC    | 27               | ± 10   | 23     | 2.52                 | 17             | 0.52    | 0.71           | 1.00           |
| PM43-330K-RC    | 33               | ± 10   | 23     | 2.52                 | 15             | 0.54    | 0.64           | 0.99           |
| PM43-390K-RC    | 39               | ± 10   | 20     | 2.52                 | 14             | 0.59    | 0.59           | 0.92           |
| PM43-470K-RC    | 47               | ± 10   | 20     | 2.52                 | 13             | 0.84    | 0.54           | 0.78           |
| PM43-560K-RC    | 56               | ± 10   | 20     | 2.52                 | 12             | 0.94    | 0.50           | 0.74           |
| PM43-680K-RC    | 68               | ± 10   | 20     | 2.52                 | 11             | 1.12    | 0.46           | 0.68           |

## Typical Part Marking



## Electrical Schematic



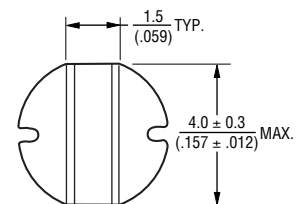
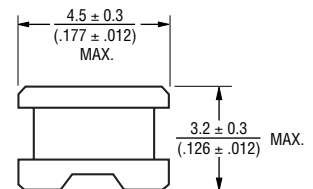
## General Specifications

Test Voltage.....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 5 sec.

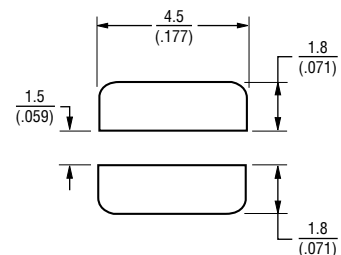
## Materials

Core ..... Ferrite DR  
 Wire ..... Enameled copper wire 130  
 Terminal ..... Ag/Ni/Sn  
 Rated Current  
 ..... Ind. drop 10 % typ. at Isat  
 Temperature Rise ..... 40 °C max.  
 at rated Irms  
 Packaging..... 1500 pcs. per reel

## Product Dimensions



## Recommended Layout



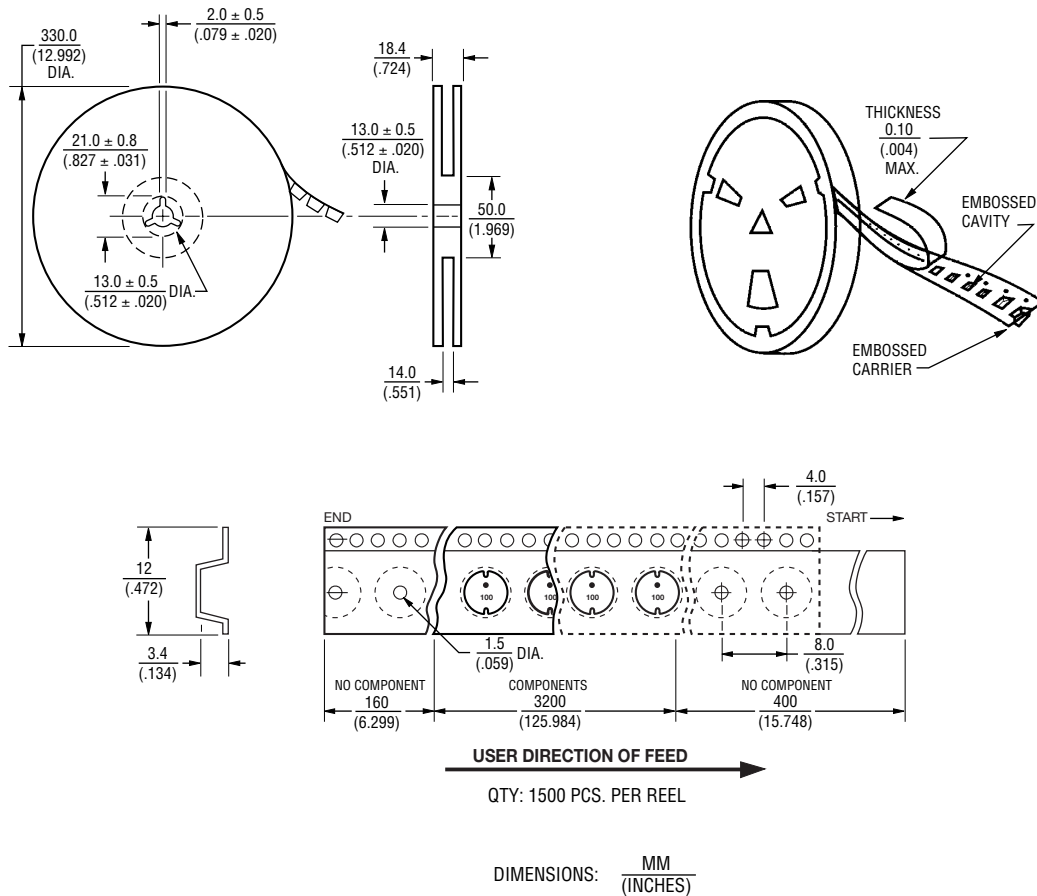
DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$

\*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.

# PM43 Series - SMD Power Inductor

**BOURNS®**

## Packaging Specifications



REV. 05/09

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# Mouser Electronics

Authorized Distributor

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## Bourns:

[PM75-471K-RC](#) [PM43-390K-RC](#) [PM75-680K-RC](#) [PM43-8R2M-RC](#) [PM43-560K-RC](#) [PM43-270M-RC](#) [PM75-820K-RC](#) [PM43-180M-RC](#) [PM43-150M-RC](#) [PM43-100M-RC](#) [PM43-680K-RC](#) [PM43-4R7M-RC](#) [PM43-2R7M-RC](#) [PM43-1R4M-RC](#) [PM43-2R2M-RC](#) [PM75-560K-RC](#) [PM43-220M-RC](#) [PM43-3R3M-RC](#) [PM43-120M-RC](#) [PM43-470K-RC](#) [PM75-100K-RC](#) [PM43-3R9M-RC](#) [PM43-330K-RC](#) [PM43-1R0M-RC](#) [PM43-1R8M-RC](#) [PM43-6R8M-RC](#) [PM43-5R6M-RC](#) [PM43-270K-RC](#)