



## Features

- Formerly J.W. Miller® model
- Available in E12 series
- Small design of only 7.8 mm maximum diameter
- RoHS compliant\*

## Applications

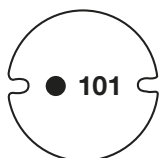
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

# PM75 Series - SMD Power Inductor

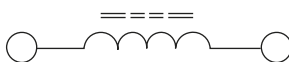
### Electrical Specifications

| 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. % |        |                      |                |         |                |                |
| PM75-100K-RC    | 10               | ± 10   | 25     | 2.52                 | 22             | 0.07    | 2.30           | 3.20           |
| PM75-120K-RC    | 12               | ± 10   | 25     | 2.52                 | 20             | 0.08    | 2.00           | 3.00           |
| PM75-150K-RC    | 15               | ± 10   | 25     | 2.52                 | 16             | 0.09    | 1.80           | 2.70           |
| PM75-180K-RC    | 18               | ± 10   | 20     | 2.52                 | 15             | 0.10    | 1.60           | 2.60           |
| PM75-220K-RC    | 22               | ± 10   | 20     | 2.52                 | 13             | 0.11    | 1.50           | 2.30           |
| PM75-270K-RC    | 27               | ± 10   | 20     | 2.52                 | 12             | 0.12    | 1.30           | 2.10           |
| PM75-330K-RC    | 33               | ± 10   | 15     | 2.52                 | 10             | 0.14    | 1.20           | 1.90           |
| PM75-390K-RC    | 39               | ± 10   | 15     | 2.52                 | 10             | 0.16    | 1.10           | 1.70           |
| PM75-470K-RC    | 47               | ± 10   | 15     | 2.52                 | 9              | 0.20    | 1.00           | 1.60           |
| PM75-560K-RC    | 56               | ± 10   | 15     | 2.52                 | 9              | 0.24    | 0.94           | 1.50           |
| PM75-680K-RC    | 68               | ± 10   | 15     | 2.52                 | 8              | 0.30    | 0.85           | 1.30           |
| PM75-820K-RC    | 82               | ± 10   | 12     | 2.52                 | 7              | 0.37    | 0.78           | 1.20           |
| PM75-101K-RC    | 100              | ± 10   | 12     | 0.796                | 7              | 0.45    | 0.72           | 1.10           |
| PM75-121K-RC    | 120              | ± 10   | 12     | 0.796                | 7              | 0.48    | 0.68           | 1.00           |
| PM75-151K-RC    | 150              | ± 10   | 12     | 0.796                | 6              | 0.68    | 0.58           | 0.85           |
| PM75-181K-RC    | 180              | ± 10   | 12     | 0.796                | 6              | 0.77    | 0.51           | 0.80           |
| PM75-221K-RC    | 220              | ± 10   | 12     | 0.796                | 5              | 0.96    | 0.49           | 0.80           |
| PM75-271K-RC    | 270              | ± 10   | 12     | 0.796                | 5              | 1.11    | 0.42           | 0.66           |
| PM75-331K-RC    | 330              | ± 10   | 12     | 0.796                | 5              | 1.26    | 0.40           | 0.58           |
| PM75-391K-RC    | 390              | ± 10   | 12     | 0.796                | 4              | 1.77    | 0.36           | 0.55           |
| PM75-471K-RC    | 470              | ± 10   | 12     | 0.796                | 4              | 1.96    | 0.34           | 0.50           |

### Typical Part Marking



### Electrical Schematic



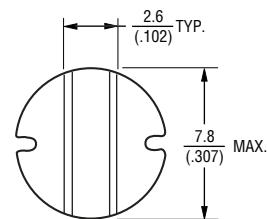
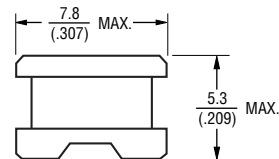
### General Specifications

Test Frequency ..... 1 KHz  
 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.  
 Moisture Sensitivity Level..... 2  
 ESD Classification (HBM)..... N/A

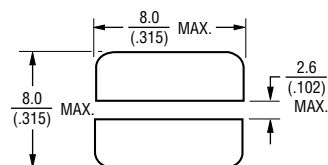
### Materials

Core..... Ferrite DR core  
 Wire ..... Enameled copper wire  
 Terminal ..... Ag/Ni/Sn  
 Rated Current  
 ..... Ind. drop 10 % typ. at Isat  
 Temperature Rise  
 ..... 40°C max. at rated Irms  
 Packaging..... 500 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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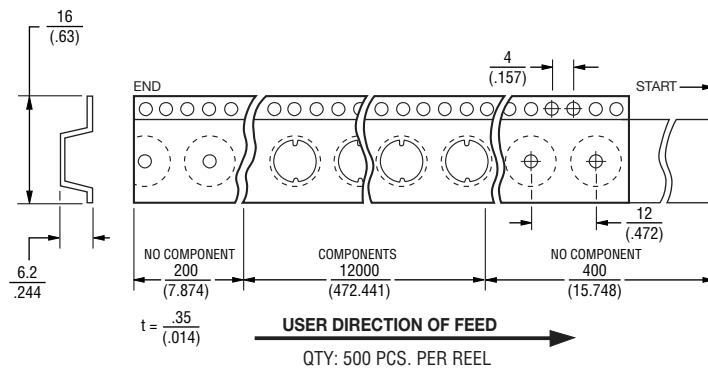
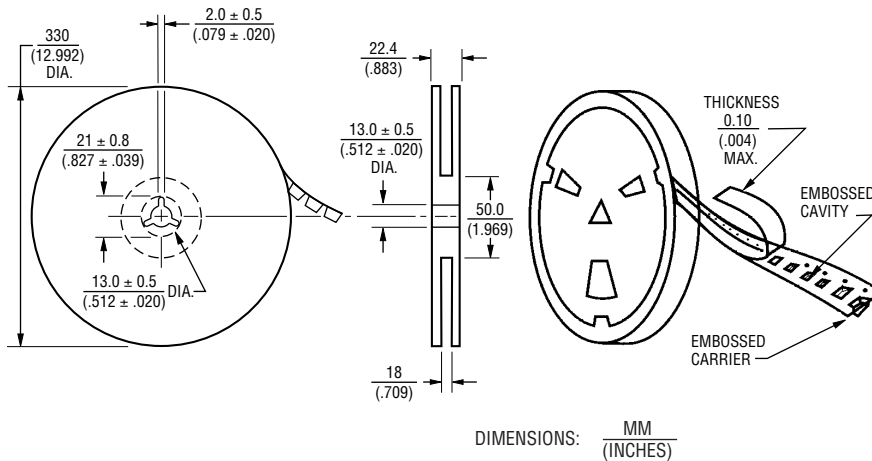
# PM75 Series - SMD Power Inductor

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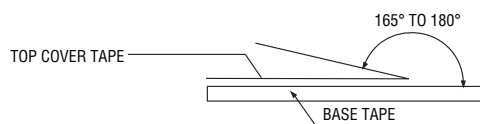
## Packaging Specifications

## Materials

Paper  
Plastics



## Strength of Cover Tape



The force for tearing off cover tape is 10 to 130 grams in the arrow direction.

REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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