



## Features

- Formerly a J.W. Miller® model
- High resistance to heat and humidity
- Resistance to mechanical shock and pressure
- Accurate dimensions for automatic surface mounting
- Inductance range: 1 to 150  $\mu$ H
- RoHS compliant\*

## Applications

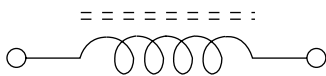
- Mobile phones
- Cellular phones
- CTV, VCR, HIC, FDD

## PM1210 Series - Chip Inductor

### Electrical Specifications @25 °C

| Bourns Part No. | Inductance |          | Q Min. | Test Frequency (MHz) | SRF Typ. (MHz) | DCR Max. ( $\Omega$ ) | IDC (mA) |
|-----------------|------------|----------|--------|----------------------|----------------|-----------------------|----------|
|                 | $\mu$ H    | Tol. (%) |        |                      |                |                       |          |
| PM1210-1R0J-RC  | 1          | $\pm 5$  | 30     | 7.96                 | 295            | 0.7                   | 400      |
| PM1210-1R2J-RC  | 1.2        | $\pm 5$  | 30     | 7.96                 | 255            | 0.75                  | 390      |
| PM1210-1R5J-RC  | 1.5        | $\pm 5$  | 30     | 7.96                 | 160            | 0.85                  | 370      |
| PM1210-1R8J-RC  | 1.8        | $\pm 5$  | 30     | 7.96                 | 125            | 0.9                   | 350      |
| PM1210-2R2J-RC  | 2.2        | $\pm 5$  | 30     | 7.96                 | 100            | 1                     | 320      |
| PM1210-2R7J-RC  | 2.7        | $\pm 5$  | 30     | 7.96                 | 65             | 1.1                   | 290      |
| PM1210-3R3J-RC  | 3.3        | $\pm 5$  | 30     | 7.96                 | 55             | 1.2                   | 260      |
| PM1210-3R9J-RC  | 3.9        | $\pm 5$  | 30     | 7.96                 | 50             | 1.3                   | 250      |
| PM1210-4R7J-RC  | 4.7        | $\pm 5$  | 30     | 7.96                 | 45             | 1.5                   | 220      |
| PM1210-5R6J-RC  | 5.6        | $\pm 5$  | 30     | 7.96                 | 40             | 1.6                   | 200      |
| PM1210-6R8J-RC  | 6.8        | $\pm 5$  | 30     | 7.96                 | 35             | 1.8                   | 180      |
| PM1210-8R2J-RC  | 8.2        | $\pm 5$  | 30     | 7.96                 | 30             | 2                     | 170      |
| PM1210-100J-RC  | 10         | $\pm 5$  | 30     | 2.52                 | 30             | 2.1                   | 150      |
| PM1210-120J-RC  | 12         | $\pm 5$  | 30     | 2.52                 | 28             | 2.5                   | 140      |
| PM1210-150J-RC  | 15         | $\pm 5$  | 30     | 2.52                 | 25             | 2.8                   | 130      |
| PM1210-180J-RC  | 18         | $\pm 5$  | 30     | 2.52                 | 22             | 3.3                   | 120      |
| PM1210-220J-RC  | 22         | $\pm 5$  | 30     | 2.52                 | 19             | 3.7                   | 110      |
| PM1210-270J-RC  | 27         | $\pm 5$  | 30     | 2.52                 | 18             | 5                     | 80       |
| PM1210-330J-RC  | 33         | $\pm 5$  | 30     | 2.52                 | 17             | 5.6                   | 70       |
| PM1210-390J-RC  | 39         | $\pm 5$  | 30     | 2.52                 | 15             | 6.4                   | 65       |
| PM1210-470J-RC  | 47         | $\pm 5$  | 30     | 2.52                 | 14             | 7                     | 60       |
| PM1210-560J-RC  | 56         | $\pm 5$  | 30     | 2.52                 | 13             | 8                     | 55       |
| PM1210-680J-RC  | 68         | $\pm 5$  | 30     | 2.52                 | 11             | 9                     | 50       |
| PM1210-820J-RC  | 82         | $\pm 5$  | 30     | 2.52                 | 10             | 10                    | 45       |
| PM1210-101J-RC  | 100        | $\pm 5$  | 20     | 0.796                | 9              | 11                    | 40       |
| PM1210-121J-RC  | 120        | $\pm 5$  | 20     | 0.796                | 8              | 11                    | 70       |
| PM1210-151J-RC  | 150        | $\pm 5$  | 20     | 0.796                | 7              | 15                    | 65       |

### Schematic



### Additional Information

Click these links for more information:



PRODUCT  
SELECTOR



TECHNICAL  
LIBRARY



INVENTORY



SAMPLES



CONTACT

### General Specifications

#### Operating Temperature

.....-40 °C to +125 °C  
(Temperature rise included)

#### Storage Temperature

.....-40 °C to +125 °C

Temperature Rise .....20 °C

Rated Current.... Inductance drops 10 %

### Materials

Core.....Ferrite

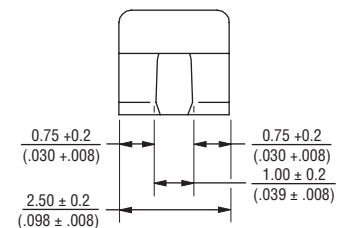
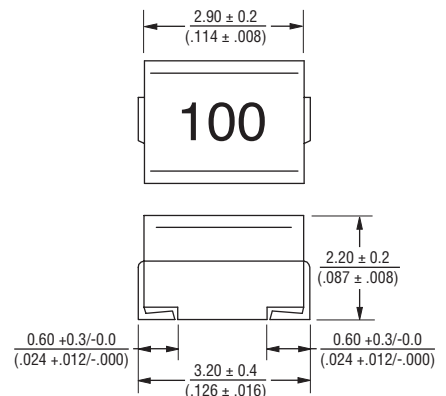
Wire.....Enamelled copper

Enclosure.....Epoxy resin

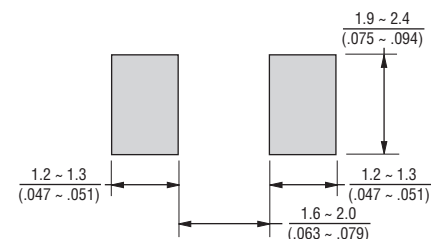
Terminal Finish.....Sn

Packaging..... 2,000 pcs. per 7-inch reel

### Product Dimensions



### Recommended Layout



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



**CALIFORNIA WARNING:** Can expose you to lead, a carcinogen and reproductive toxicant.  
See [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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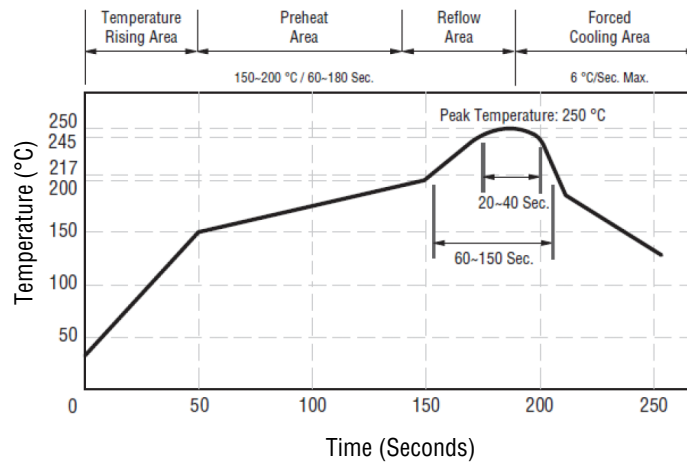
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

## PM1210 Series - Chip Inductor

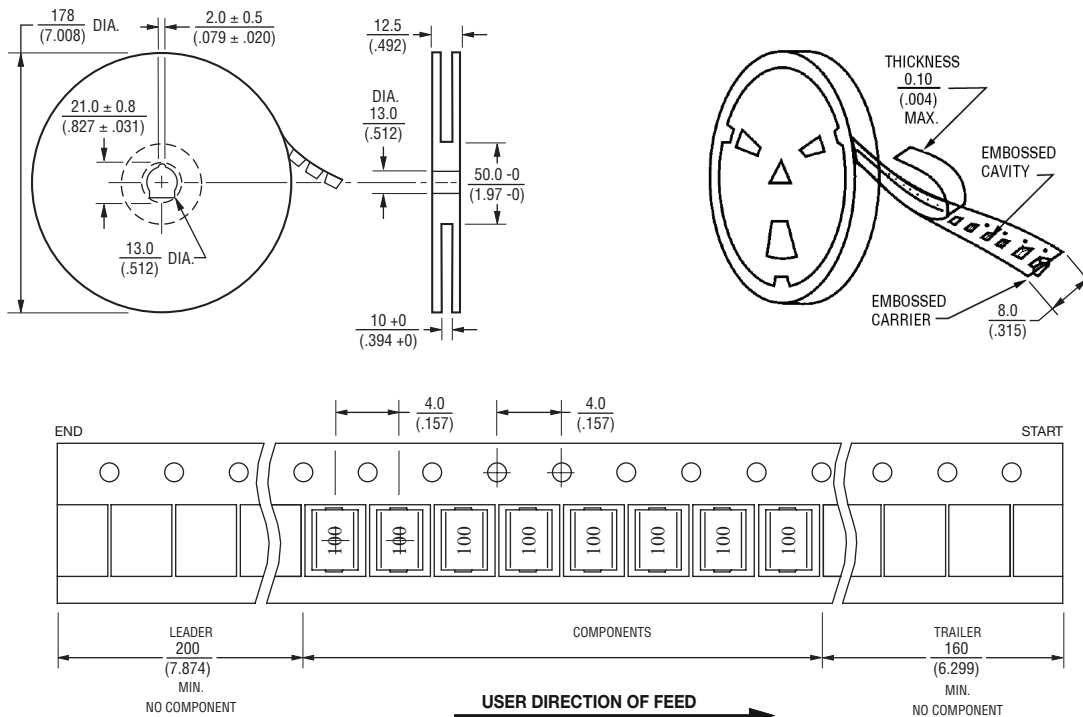
**BOURNS®**

### Soldering Profile

Peak Temperature: 250 °C max.  
 Max. Time Above 245 °C  
 Max. Time Above 217 °C: 60~150 sec. max.  
 200 °C ~ 250 °C Average Ramp-up Rate: 3 °C / sec. max.



### Packaging Specifications



REV. 03/26

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Users should verify actual device performance in their specific applications.

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