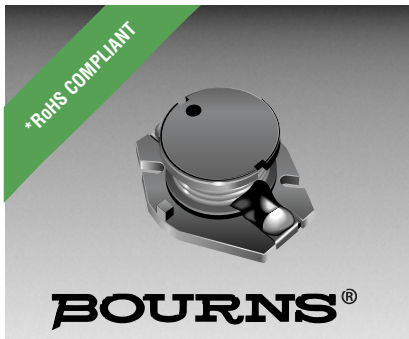




**THE DATASHEET OF
PM5022-680M-RC**





Features

- Formerly **J. W. Miller®** model
- Available in E6 series
- Low profile of only 6.6 mm
- Inductance as low as 1 μ H
- RoHS compliant*

Applications

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

PM5022 Series - SMD Power Inductor

Electrical Specifications

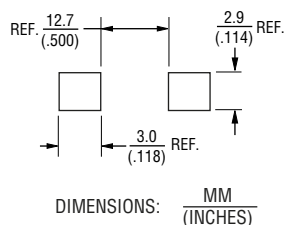
| Bourns Part No. | Inductance 100 kHz | | Test Q Ref. | SRF Frequency (MHz) | Typ. (MHz) | RDC (m Ω) | I rms Max. (A) | I sat Typ. (A) |
|------------------|-----------------------|----------|-------------------|---------------------------|---------------|----------------------|----------------------|----------------------|
| | (μ H) | Tol. % | | | | | | |
| PM5022-1R0M-RC | 1.0 | ± 20 | 21 | 7.96 | 100.0 | 4.0 | 10.0 | 30.00 |
| PM5022-2R2M-RC | 2.2 | ± 20 | 22 | 7.96 | 55.0 | 6.8 | 9.00 | 22.00 |
| PM5022-3R3M-RC | 3.3 | ± 20 | 22 | 7.96 | 40.0 | 9.8 | 7.60 | 17.00 |
| PM5022-5R6M-RC | 5.6 | ± 20 | 23 | 7.96 | 30.0 | 15.0 | 6.40 | 12.80 |
| PM5022-8R2M-RC | 8.2 | ± 20 | 22 | 7.96 | 27.0 | 20.0 | 7.00 | 9.40 |
| PM5022-100M-RC | 10 | ± 20 | 22 | 2.52 | 25.0 | 25.0 | 5.30 | 10.00 |
| PM5022-150M-RC | 15 | ± 20 | 20 | 2.52 | 17.0 | 35.0 | 4.30 | 8.00 |
| PM5022-220M-RC | 22 | ± 20 | 22 | 2.52 | 13.0 | 45.0 | 3.60 | 6.70 |
| PM5022-330M-RC | 33 | ± 20 | 24 | 2.52 | 11.0 | 68.0 | 3.00 | 5.40 |
| PM5022-470M-RC | 47 | ± 20 | 22 | 2.52 | 9.0 | 95.0 | 2.50 | 4.60 |
| PM5022-680M-RC | 68 | ± 20 | 22 | 2.52 | 8.0 | 130.0 | 2.10 | 3.80 |
| PM5022-101<1>-RC | 100 | ± 10 | 25 | 0.796 | 7.0 | 190.0 | 1.70 | 3.20 |
| PM5022-151<1>-RC | 150 | ± 10 | 23 | 0.796 | 5.0 | 270.0 | 1.40 | 2.60 |
| PM5022-221<1>-RC | 220 | ± 10 | 20 | 0.796 | 4.5 | 420.0 | 1.10 | 2.20 |
| PM5022-331<1>-RC | 330 | ± 10 | 18 | 0.796 | 3.5 | 580.0 | 1.00 | 1.80 |
| PM5022-471<1>-RC | 470 | ± 10 | 15 | 0.796 | 3.0 | 820.0 | 0.80 | 1.50 |
| PM5022-681<1>-RC | 680 | ± 10 | 12 | 0.796 | 2.5 | 1200.0 | 0.70 | 1.20 |
| PM5022-102<1>-RC | 1000 | ± 10 | 10 | 0.252 | 2.0 | 1800.0 | 0.50 | 1.00 |

<1> Enter tolerance code: K = ± 10 %, M = ± 20 %.

Electrical Schematic



Recommended Layout



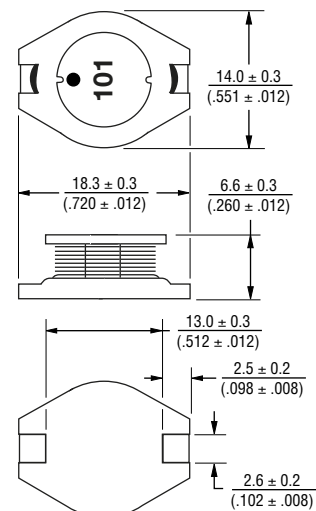
General Specifications

Test Voltage 0.1 V
 Reflow soldering 250 °C; 10 sec max.
 (In compliance with JEDEC, J-STD-020C, Table 4-2)
 Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature -40 °C to +125 °C
 Resistance to Soldering Heat 250 °C, 10 sec. max.
 Moisture Sensitivity Level 2
 ESD Classification (HBM) N/A

Materials

Core Ferrite DR
 Wire Enamelled copper
 Base LCP E4008
 Terminal Cu/Sn
 Rated Current Ind. drop 10 % typ. at Isat
 Temp. Rise 40 °C max. at rated Irms
 Packaging 250 pcs. per reel

Product Dimensions



• = START OF WINDING



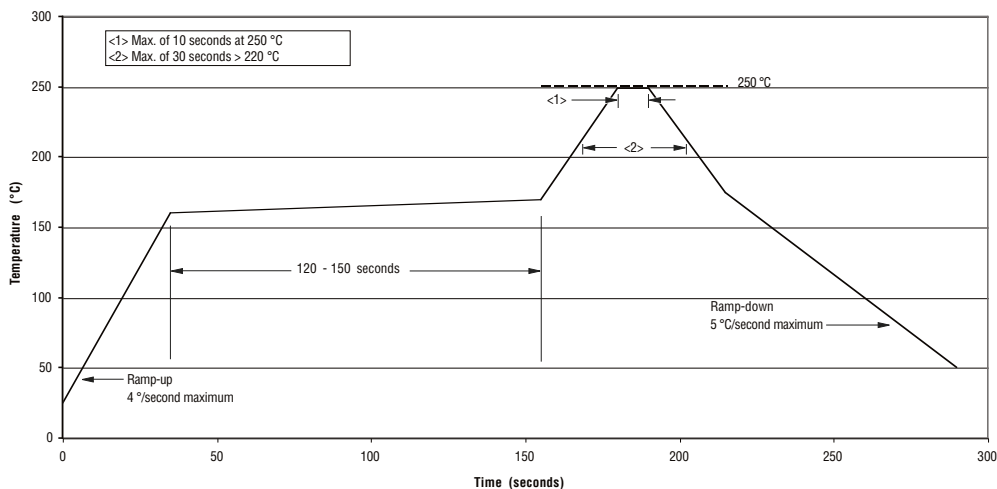
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*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. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

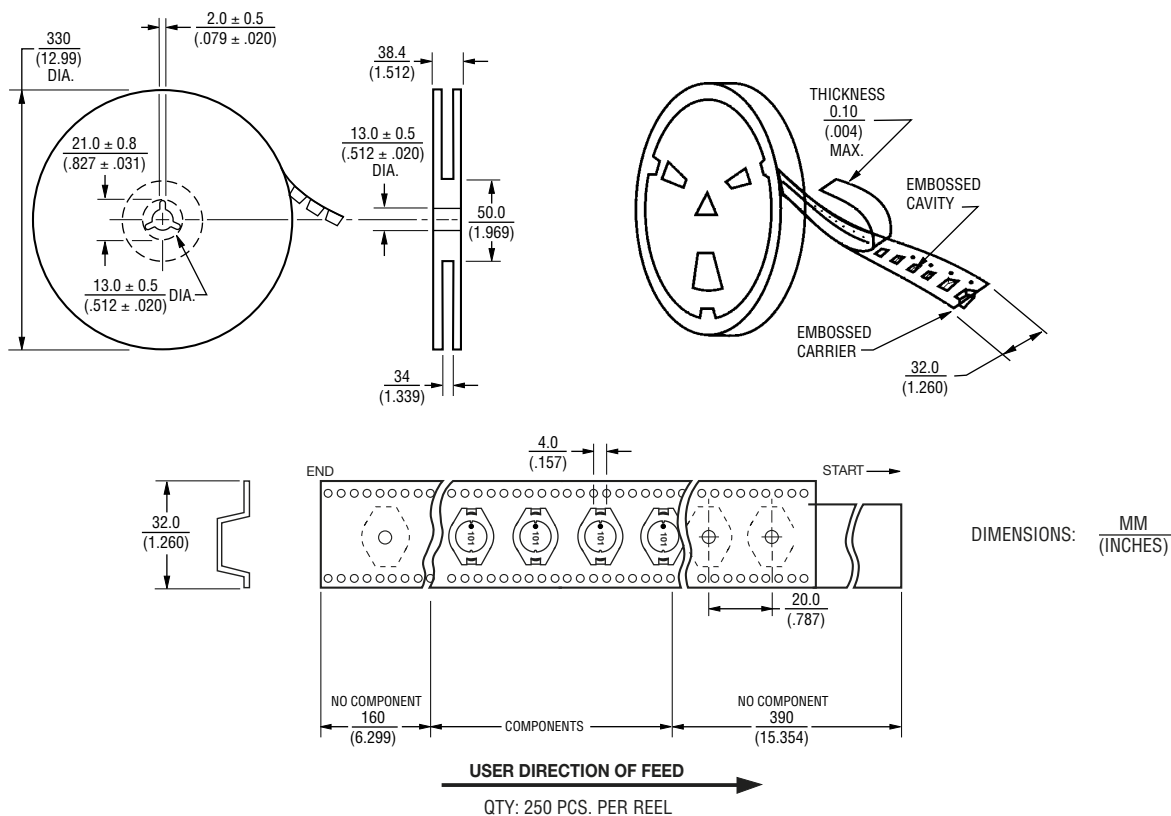
PM5022 Series - SMD Power Inductor

BOURNS®

Soldering Profile



Packaging Specifications



REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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-  Alternative Solution
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