



Features

- Formerly J.W. Miller® model
- Available in E12 series
- Unit height of 6.8 mm
- Current up to 8 A Isat
- RoHS compliant*

Applications

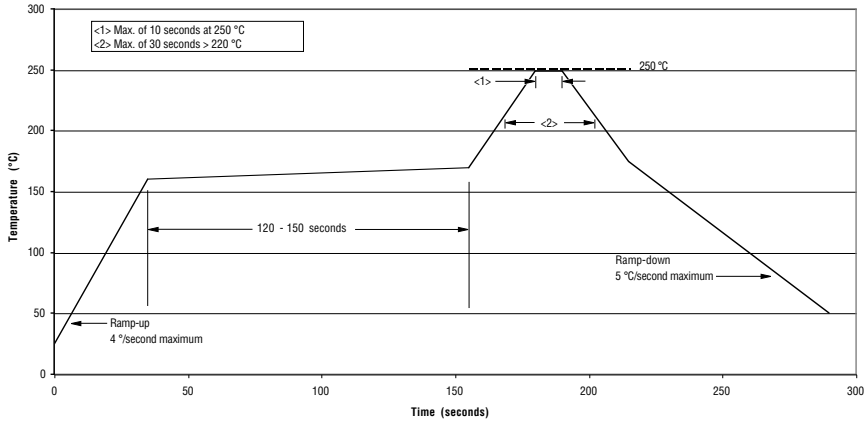
- Input/output of DC/DC converters
- Power supplies for:
 - Portable communication equipment
 - Camcorders
 - LCD TVs

PM5022S Series - Shielded Power Inductor

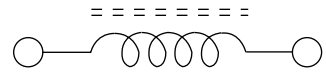
Electrical Specifications

| Bourns Part No. | Inductance 100 kHz | | Q Ref. | Test Frequency (MHz) | SRF Typ. (MHz) | RDC -20 % (Ω) | I rms Max. (A) | I sat Typ. (A) |
|-----------------|--------------------|--------|--------|----------------------|----------------|---------------|----------------|----------------|
| | (μH) | Tol. % | | | | | | |
| PM5022S-100M-RC | 10 | ± 20 | 56 | 2.52 | 19.0 | 0.033 | 4.00 | 8.20 |
| PM5022S-150M-RC | 15 | ± 20 | 53 | 2.52 | 17.5 | 0.039 | 3.60 | 7.20 |
| PM5022S-220M-RC | 22 | ± 20 | 51 | 2.52 | 16.0 | 0.053 | 3.00 | 6.20 |
| PM5022S-330M-RC | 33 | ± 20 | 44 | 2.52 | 10.0 | 0.083 | 2.50 | 5.00 |
| PM5022S-470M-RC | 47 | ± 20 | 40 | 2.52 | 8.0 | 0.110 | 2.00 | 4.20 |
| PM5022S-680M-RC | 68 | ± 20 | 37 | 2.52 | 6.0 | 0.170 | 1.60 | 3.40 |
| PM5022S-101M-RC | 100 | ± 20 | 40 | 0.796 | 4.6 | 0.270 | 1.30 | 2.60 |
| PM5022S-151M-RC | 150 | ± 20 | 39 | 0.796 | 4.3 | 0.400 | 1.05 | 2.30 |
| PM5022S-221M-RC | 220 | ± 20 | 29 | 0.796 | 3.5 | 0.510 | 1.00 | 1.90 |
| PM5022S-331M-RC | 330 | ± 20 | 30 | 0.796 | 3.0 | 0.790 | 0.80 | 1.40 |
| PM5022S-471M-RC | 470 | ± 20 | 27 | 0.796 | 2.4 | 1.000 | 0.64 | 1.30 |
| PM5022S-681M-RC | 680 | ± 20 | 19 | 0.796 | 2.1 | 1.470 | 0.54 | 1.10 |
| PM5022S-102M-RC | 1000 | ± 20 | 46 | 0.796 | 1.5 | 2.160 | 0.45 | 0.90 |

Soldering Profile



Electrical Schematic



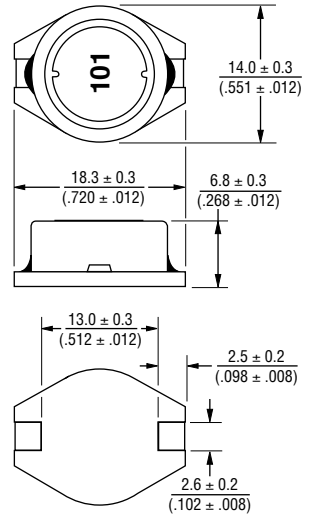
General Specifications

Test Voltage0.1 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 .. -45 °C to +125 °C
 Resistance to Soldering Heat 250 °C, 10 sec. max.
 Moisture Sensitivity Level..... 1
 ESD Classification (HBM)..... N/A

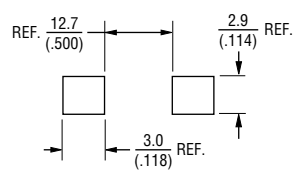
Materials

Core.....Ferrite core
 WireEnameled copper
 BaseLCP E4008
 Terminal.....Cu/Ni/Sn
 Rated CurrentInd. drop 10 % typ. at Isat
 Temp. Rise.....40 °C max. at rated I rms
 Packaging..... 250 pcs. per reel

Product Dimensions



Recommended Layout



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



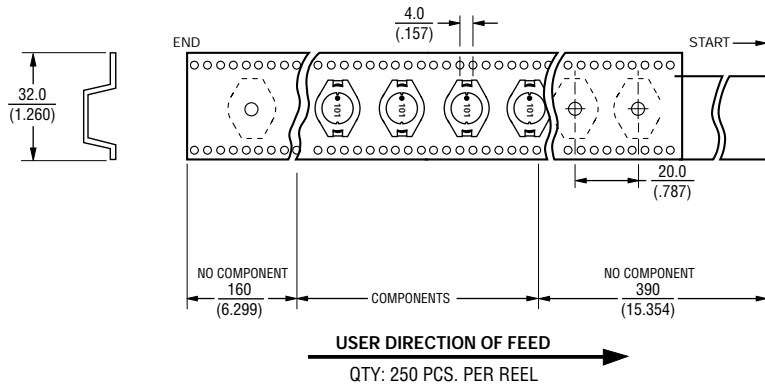
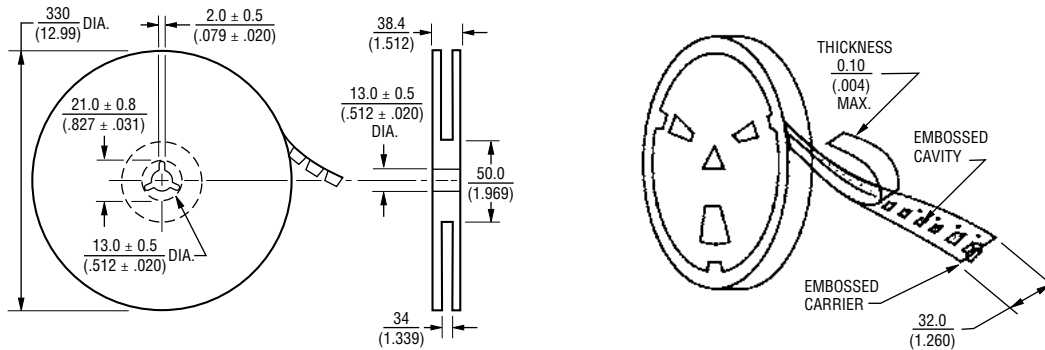
WARNING Cancer and Reproductive Harm www.P65Warnings.ca.gov

* 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. 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.

PM5022S Series - Shielded Power Inductor

BOURNS®

Packaging Specifications



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

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REV. 11/19

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Users should verify actual device performance in their specific applications.

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