


## 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

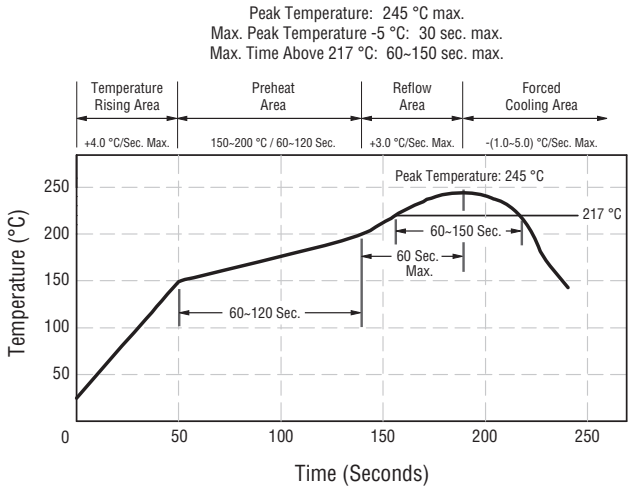
- Input/output of DC-DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

# PM5022S Series - Shielded Power Inductor

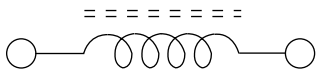
### Electrical Specifications

| Bourns Part No. | Inductance 100 kHz (µH) | Tol. % | Q Ref. | Test Frequency (MHz) | SRF Typ. (MHz) | RDC -20 % (Ω) | I rms Max. (A) | I sat Typ. (A) |
|---|---|---|---|---|---|---|---|---|
| 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 | 0.252 | 1.5 | 2.160 | 0.45 | 0.90 |

### Soldering Profile




### Electrical Schematic



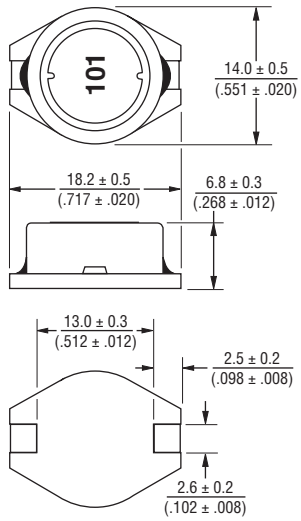
### General Specifications

Test Voltage.....0.1 V
Operating Temperature
.....-40 °C to +125 °C
(Temperature rise included)
Storage Temperature .. -45 °C to +125 °C
Moisture Sensitivity Level.....1
ESD Classification (HBM).....N/A

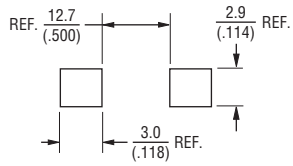
### Materials

Core.....Ferrite core
Wire .....Enameled copper
Base .....LCP E4008
Terminal Finish .....Sn
Rated Current
.....Ind. drop 10 % typ. at Isat
Temp. Rise.....40 °C typ. at rated Irms
Packaging.....250 pcs. per reel

### Product Dimensions




### Recommended Layout

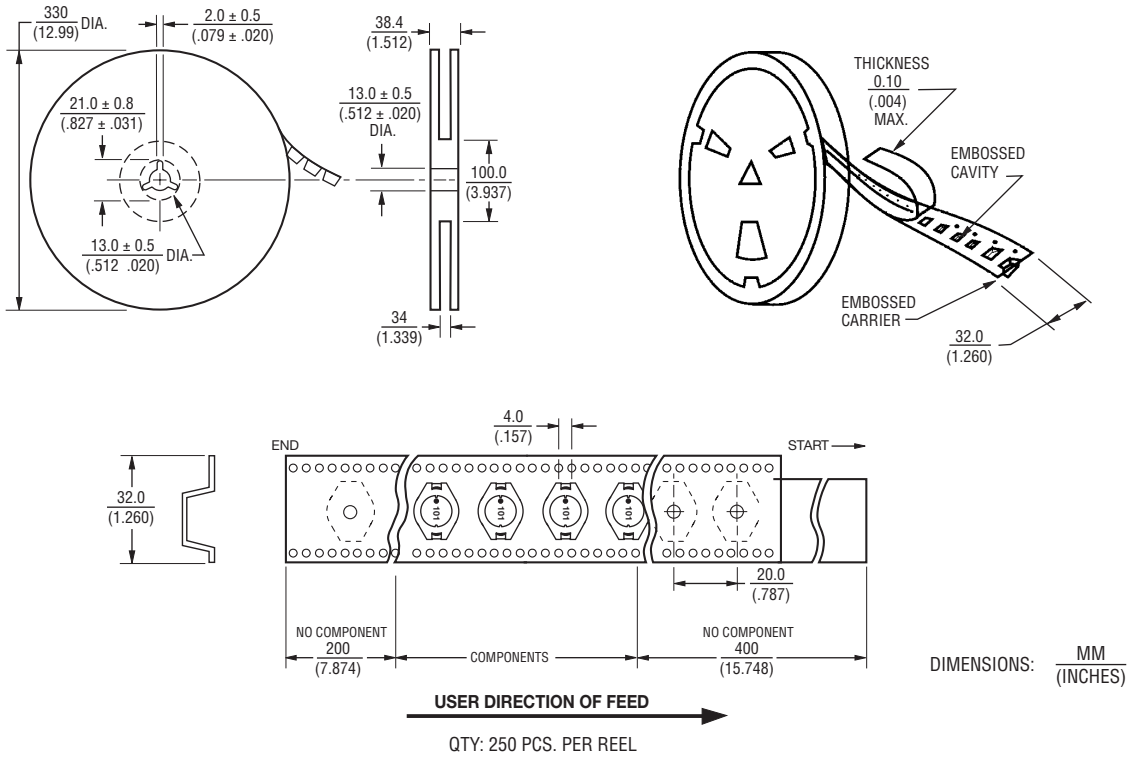



DIMENSIONS: MM / (INCHES)

**CALIFORNIA WARNING:** Can expose you to lead, a carcinogen and reproductive toxicant. See www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
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Users should verify actual device performance in their specific applications.
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**Mexico:** Tel: +52 614 478 0400 • Email: mexicus@bourns.com
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