

## Features

- Formerly **J.W. Miller**® model
- Available in E12 series
- Unit height of 3 mm
- Current up to 3 A
- RoHS compliant\*

## Applications

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

# PM1608S Series - Shielded Power Inductor

## Electrical Specifications

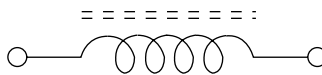
Bourns Part No.	Inductance 100 kHz		Q Min.	Test Frequency (kHz) Q	SRF Nom. (MHz)	RDC Max. (Ω)	IDC Max. (A)
	(μH)	Tol. %					
PM1608S-1R0M-RC	1.0	± 20	10	100	70	0.040	3.00
PM1608S-1R5M-RC	1.5	± 20	20	100	70	0.045	2.80
PM1608S-2R2M-RC	2.2	± 20	25	100	70	0.050	1.80
PM1608S-3R3M-RC	3.3	± 20	40	100	60	0.055	1.60
PM1608S-4R7M-RC	4.7	± 20	40	100	60	0.060	1.40
PM1608S-6R8M-RC	6.8	± 20	40	100	50	0.065	1.20
PM1608S-100M-RC	10	± 20	40	100	38	0.075	1.00
PM1608S-150M-RC	15	± 20	40	100	33	0.090	0.80
PM1608S-220M-RC	22	± 20	40	100	25	0.110	0.70
PM1608S-330M-RC	33	± 20	40	100	20	0.190	0.60
PM1608S-470M-RC	47	± 20	40	100	20	0.230	0.50
PM1608S-680M-RC	68	± 20	40	100	15	0.290	0.40
PM1608S-101M-RC	100	± 20	40	100	10	0.480	0.30
PM1608S-151M-RC	150	± 20	40	100	9	0.590	0.26
PM1608S-221M-RC	220	± 20	40	100	6	0.770	0.22
PM1608S-331M-RC	330	± 20	40	100	5	1.400	0.20
PM1608S-471M-RC	470	± 20	40	100	4	1.800	0.19
PM1608S-681M-RC	680	± 20	40	100	3	2.200	0.18
PM1608S-102M-RC	1000	± 20	40	100	2	3.400	0.15
PM1608S-152M-RC	1500	± 20	50	100	2	4.200	0.12
PM1608S-222M-RC	2200	± 20	50	100	2	8.500	0.10
PM1608S-332M-RC	3300	± 20	50	100	1	11.000	0.08
PM1608S-472M-RC	4700	± 20	50	100	1	13.900	0.06
PM1608S-682M-RC	6800	± 20	50	100	1	25.000	0.04
PM1608S-103M-RC	10,000	± 20	50	100	0.8	32.800	0.02

## Additional Information

Click these links for more information:



## Electrical Schematic



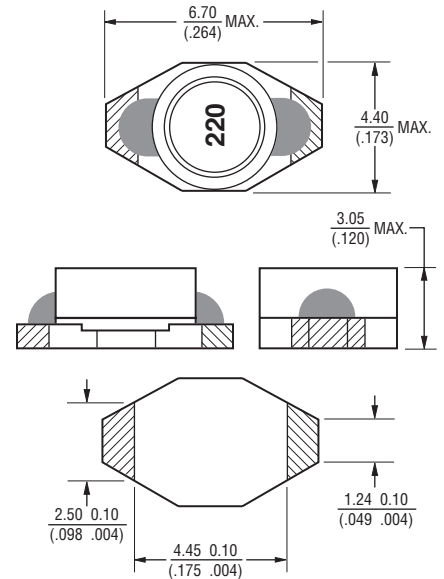
## General Specifications

Test Voltage .....0.1 V  
 Operating Temp. ....-55 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature .. -55 °C to +125 °C  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM)..... N/A

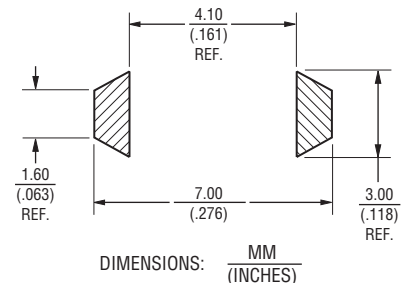
## Materials

Core ..... Ferrite DR & RI core  
 Wire ..... Enameled copper  
 Base ..... Ceramic  
 Terminal ..... Ag/Ni/Au  
 Temp. Rise ..... 30 °C max. at rated I<sub>rms</sub>  
 Packaging ..... 600 pcs. per reel

## Product Dimensions



## Recommended Layout



**CALIFORNIA WARNING:** Can expose you to lead, a carcinogen and reproductive toxicant.  
 See [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.  
 Specifications are subject to change without notice.

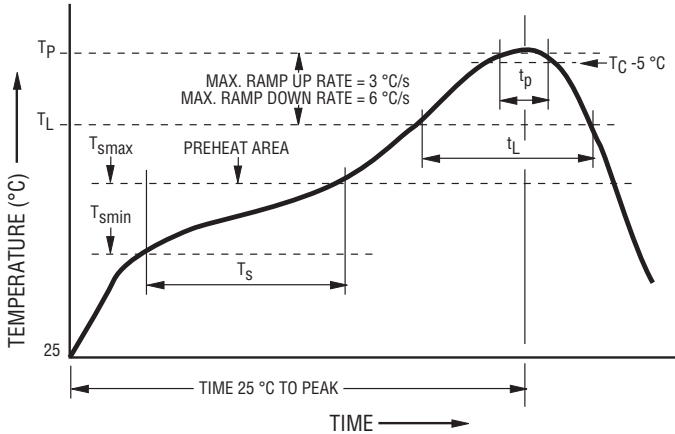
Users should verify actual device performance in their specific applications.

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# PM1608S Series - Shielded Power Inductor

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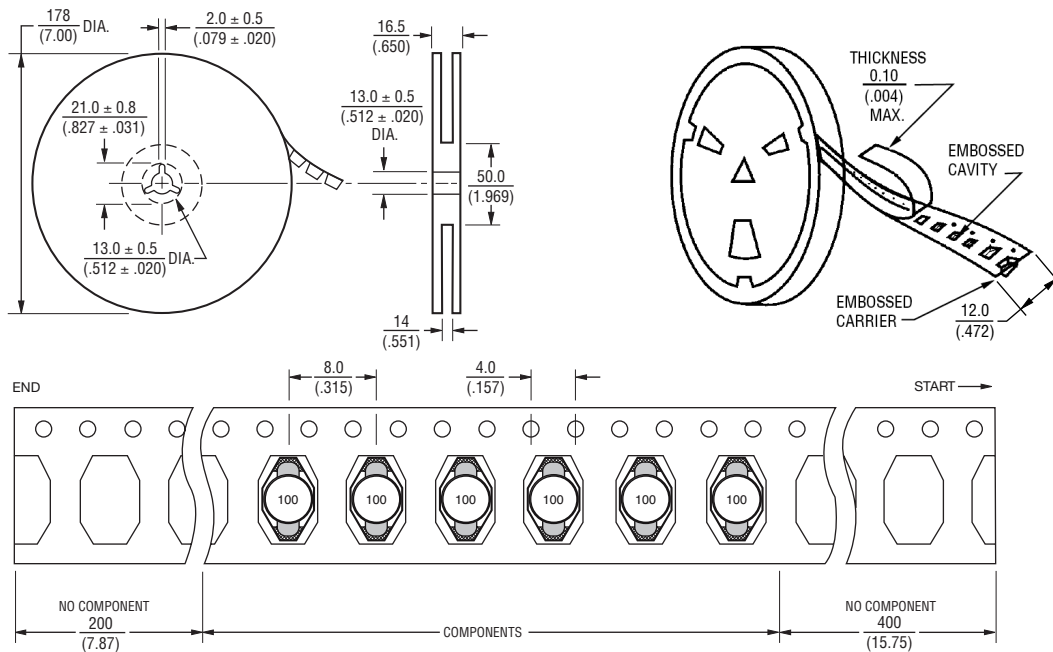
## Soldering Profile



Profile Feature	Pb-Free Assembly
Preheat / Soak:	
Temperature Min. ( $T_{smin}$ )	150 °C
Temperature Max. ( $T_{smax}$ )	200 °C
Time ( $t_s$ ) from ( $T_{smin}$ to $T_{smax}$ )	60~120 seconds
Ramp Up Rate ( $T_L$ to $T_p$ )	3 °C / second max.
Liquidous Temperature ( $T_L$ )	217 °C
Time ( $t_L$ ) maintained above $T_L$	60~150 seconds
Classification Temperature ( $T_C$ )	250 °C
Time ( $t_p$ ) within 5 °C of the specified classification temperature ( $T_C$ )	< 30 seconds
Ramp Down Rate ( $T_p$ to $T_L$ )	6 °C / second max.
Time 25 °C to Peak Temperature	8 minutes max.

NOTE: The product has been tested under this reflow condition. Deviations from this, especially higher temperatures or longer durations, could impact performance.

## Packaging Specifications



USER DIRECTION OF FEED → DIMENSIONS:  $\frac{MM}{(INCHES)}$   
 QTY: 600 PCS. PER REEL

REV. 03/26

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Users should verify actual device performance in their specific applications.

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