



## Features

- Formerly J. W. Miller® model
- Available in E6 series
- Low profile of only 5.0 mm
- Inductance as low as 1.0  $\mu\text{H}$
- RoHS compliant\*

## Applications

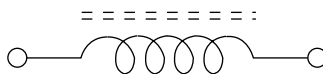
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

# PM3316 Series - SMD Power Inductors

### Electrical Specifications

Bourns Part No.	Inductance 1 kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC ( $\Omega$ )	I rms Max. (A)	I sat Typ. (A)
	( $\mu\text{H}$ )	Tol. %						
PM3316-1R0M-RC	1	$\pm 20$	20	10	137	0.007	7.50	9.00
PM3316-1R5M-RC	1.5	$\pm 20$	50	3	95	0.009	6.50	8.00
PM3316-2R2M-RC	2.2	$\pm 20$	50	3	65	0.012	6.10	7.00
PM3316-3R3M-RC	3.3	$\pm 20$	50	4	54	0.015	5.00	6.40
PM3316-4R7M-RC	4.7	$\pm 20$	50	4	42	0.019	4.50	5.40
PM3316-6R8M-RC	6.8	$\pm 20$	50	3	31	0.030	3.40	4.50
PM3316-100M-RC	10	$\pm 20$	50	3	26	0.050	2.90	3.70
PM3316-150M-RC	15	$\pm 20$	50	3	22	0.060	2.50	3.00
PM3316-220M-RC	22	$\pm 20$	40	3	18	0.10	2.00	2.50
PM3316-330M-RC	33	$\pm 20$	25	1	14	0.12	1.80	2.00
PM3316-470M-RC	47	$\pm 20$	25	1	12	0.19	1.40	1.60
PM3316-680M-RC	68	$\pm 20$	25	1	11	0.24	1.20	1.40
PM3316-101M-RC	100	$\pm 20$	30	0.05	8	0.33	1.00	1.20
PM3316-151M-RC	150	$\pm 20$	30	0.05	6	0.59	0.80	1.00
PM3316-221M-RC	220	$\pm 20$	33	0.05	5	0.78	0.70	0.80
PM3316-331M-RC	330	$\pm 20$	33	0.05	4	1.15	0.55	0.60
PM3316-471M-RC	470	$\pm 20$	57	0.05	4	1.70	0.45	0.50
PM3316-681M-RC	680	$\pm 20$	57	0.05	3	2.60	0.35	0.40
PM3316-102M-RC	1000	$\pm 20$	81	0.07	2	3.90	0.30	0.35

### Electrical Schematic



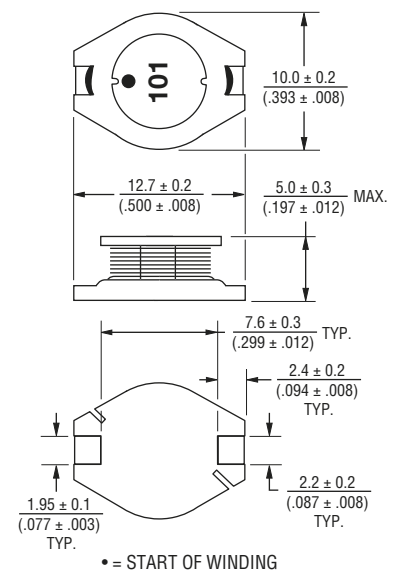
### General Specifications

Test Voltage ..... 0.1 V  
 Reflow soldering .... 250 °C; 10 sec max.  
 (In compliance with JEDEC, J-STD-020C, Table 4-2)  
 Operating Temperature ..... -55 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature .. -55 °C to +125 °C  
 Resistance to Soldering Heat ..... 250 °C, 10 sec. max.  
 Moisture Sensitivity Level ..... 2  
 ESD Classification (HBM) ..... N/A

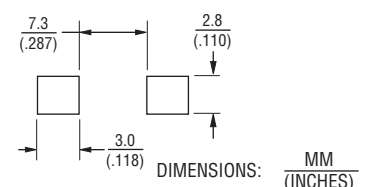
### Materials

Core ..... Ferrite DR  
 Wire ..... Enameled copper  
 Base ..... DAP  
 Terminal ..... Cu/Sn  
 Rated Current ..... Ind. drop 10 % typ. at Isat  
 Temperature Rise ..... 15 °C max. at rated Irms  
 Packaging ..... 500 pcs. per reel

### Product Dimensions



### Recommended Layout



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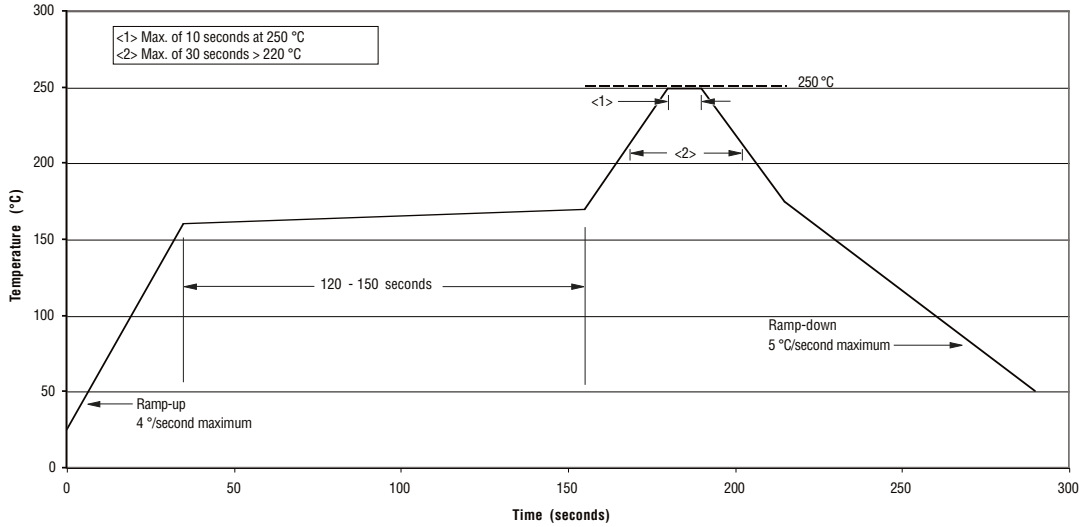
**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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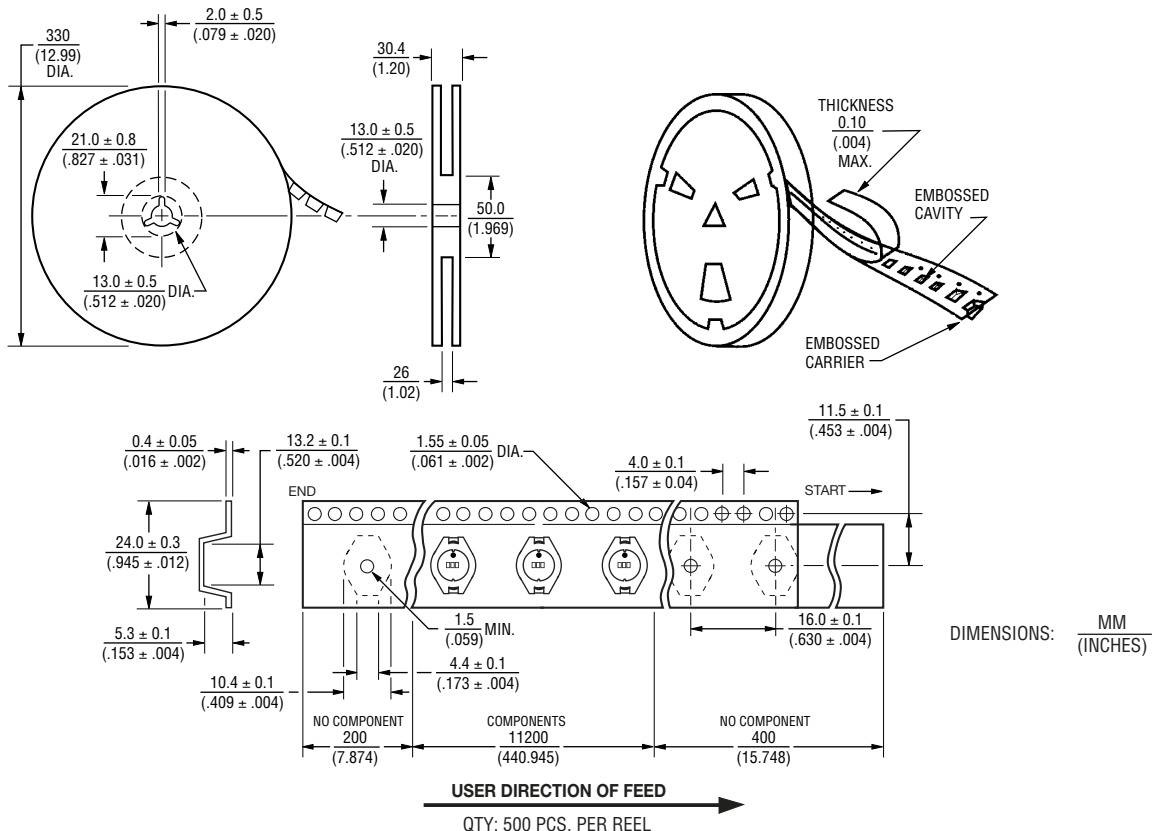
# PM3316 Series - SMD Power Inductors

**BOURNS®**

## Soldering Profile



## Packaging Specifications



REV. 03/18

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