

## Features

- Formerly J. W. Miller® model
- Height of 2.0 mm max.
- Current rating up to 2.0 A
- RoHS compliant\*

## Applications

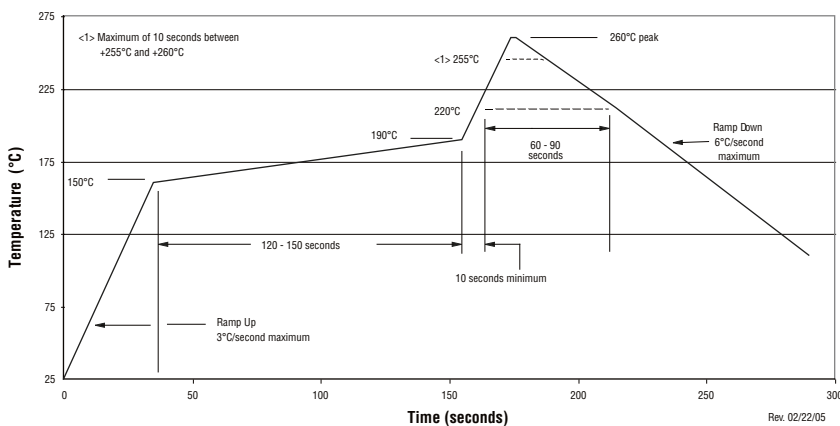
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

# PM518S Series - Shielded SMD Power Inductors

### Electrical Specifications

Bourns Part No.	Inductance 100 kHz		Q Ref.	Test Frequency (MHz)	SRF Typ. (MHz)	DCR Max. (mΩ)	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)
	(μH)	Tol. %						
PM518S-4R1-RC	4.1	±30	8	7.96	60	55	2.00	2.10
PM518S-5R4-RC	5.4	±30	7.4	7.96	58	76	1.65	1.65
PM518S-6R2-RC	6.2	±30	7.5	7.96	51	80	1.45	1.60
PM518S-8R9-RC	8.9	±30	7.3	7.96	40	116	1.25	1.25
PM518S-100-RC	10	±30	11	2.52	41	130	1.10	1.25
PM518S-120-RC	12	±30	8.6	2.52	39	160	1.00	1.15
PM518S-150-RC	15	±30	12.7	2.52	32	190	0.95	1.10
PM518S-180-RC	18	±30	8.8	2.52	29	210	0.90	1.00
PM518S-220-RC	22	±30	14.7	2.52	22	280	0.80	0.90
PM518S-270-RC	27	±30	10.2	2.52	21	320	0.75	0.80
PM518S-330-RC	33	±30	10.9	2.52	20	350	0.65	0.70
PM518S-390-RC	39	±30	10.6	2.52	17	500	0.55	0.65
PM518S-470-RC	47	±30	8.9	2.52	14	550	0.52	0.60
PM518S-560-RC	56	±30	8.9	2.52	13	600	0.48	0.55
PM518S-680-RC	68	±30	9.9	2.52	12	850	0.40	0.50
PM518S-820-RC	82	±30	9.1	2.52	11	950	0.38	0.45
PM518S-101-RC	100	±30	13.1	0.796	10	1100	0.35	0.42

### Soldering Profile



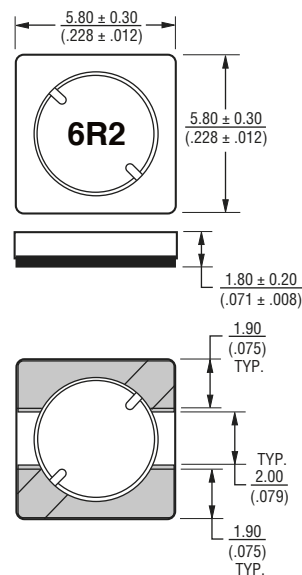
### General Specifications

Test Voltage ..... 0.1 V, 100 KHz  
 Reflow Soldering .... 230 °C; 50 sec max.  
 Operating Temperature  
 ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature .. -40 °C to +125 °C  
 Resistance to Soldering Heat  
 ..... 260 °C for 10 sec.  
 Moisture Sensitivity Level ..... 2  
 ESD Classification (HBM)..... N/A

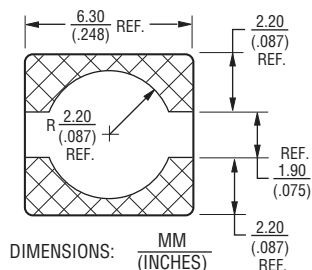
### Materials

Core Material ..... Ferrite  
 Wire ..... Enameled Copper  
 Adhesive ..... Epoxy Resin  
 Terminal ..... Ag/Ni/Sn  
 Rated Current ..... Ind. drop of 35 % typ.  
 at I<sub>sat</sub>  
 Temperature Rise ..... 40 °C typ. at I<sub>rms</sub>  
 Packaging ..... 2000 pcs. per reel

### Product Dimensions



### Recommended Layout



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

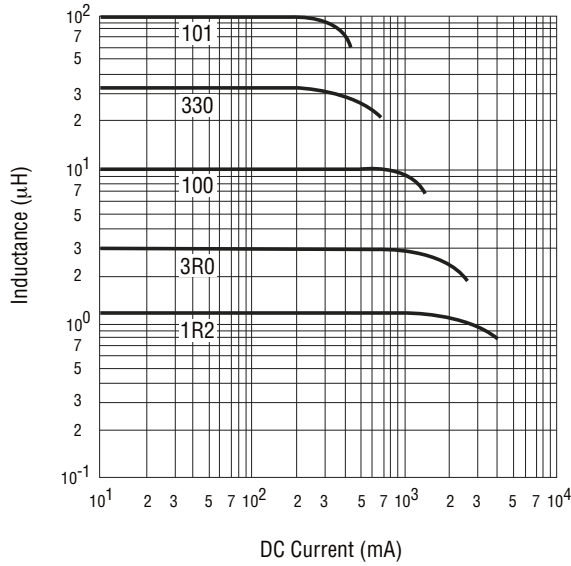
\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
 Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at [www.bourns.com/docs/legal/disclaimer.pdf](http://www.bourns.com/docs/legal/disclaimer.pdf)

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

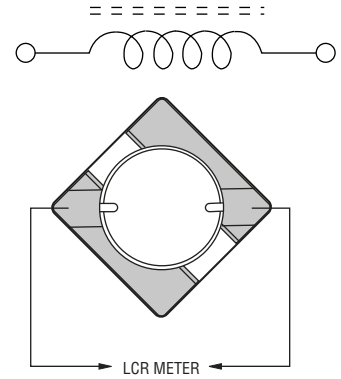
# PM518S Series - Shielded SMD Power Inductors

**BOURNS®**

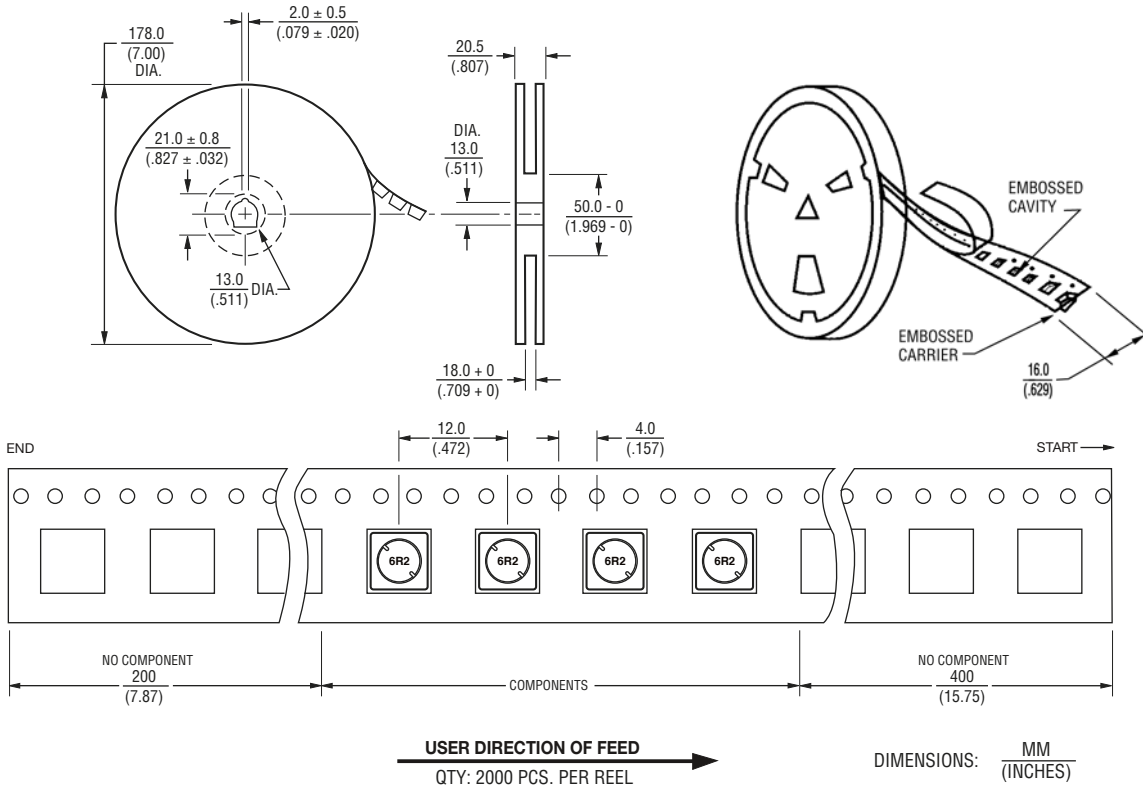
## Inductance vs. Current



## Electrical Schematic



## 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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