

## Features

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

## Applications

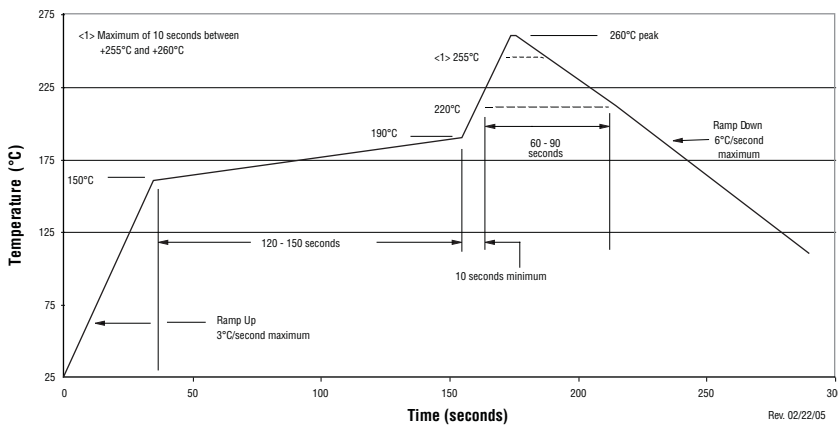
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs
  - Car radios

# 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



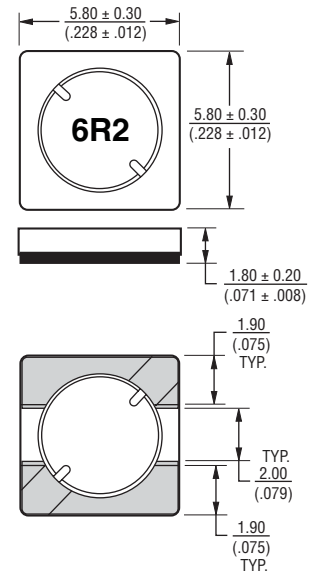
## General Specifications

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.

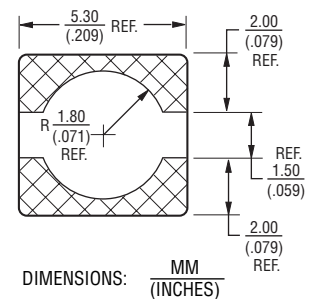
## Materials

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

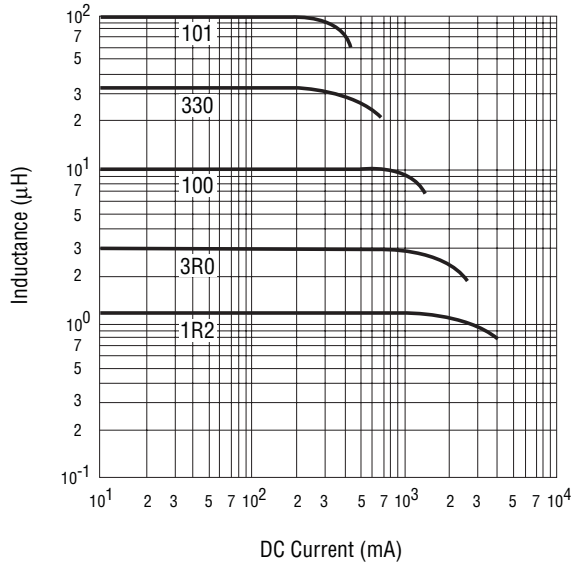


\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.

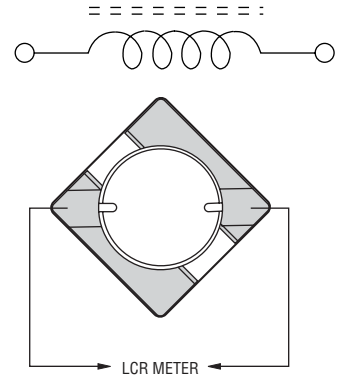
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**BOURNS®**

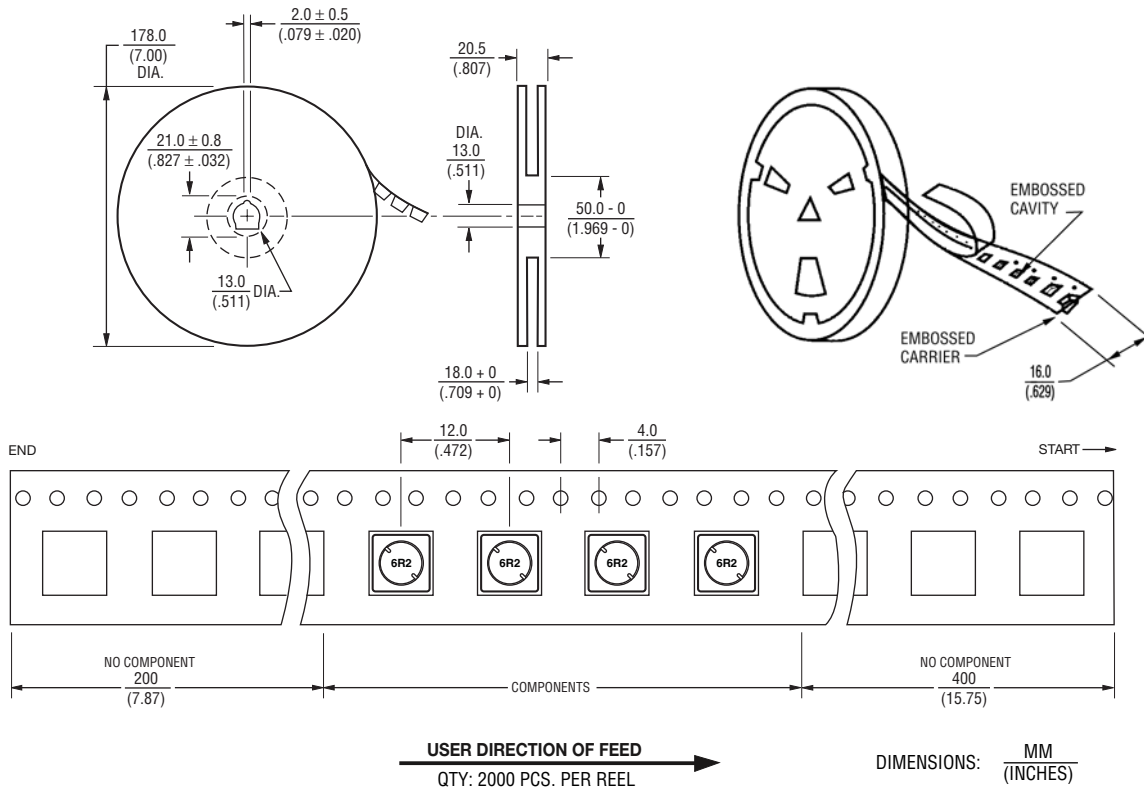
## Inductance vs. Current



## Electrical Schematic



## Packaging Specifications



REV. 05/09

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