



## Features

- Formerly *J.W. Miller* model
- Height of 3.0 mm max.
- Current rating up to 3.1 A
- RoHS compliant\*

## Applications

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

# PM428S Series - Shielded SMD Power Inductor

## 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. %						
PM428S-1R2-RC	1.2	±30	9.34	7.96	176	20	3.10	2.56
PM428S-1R8-RC	1.8	±30	9.18	7.96	146	25	2.70	2.20
PM428S-2R2-RC	2.2	±30	9.24	7.96	111	28	2.50	2.05
PM428S-2R7-RC	2.7	±30	8.64	7.96	92	30	2.35	1.80
PM428S-3R3-RC	3.3	±30	7.72	7.96	76	35	2.15	1.65
PM428S-3R9-RC	3.9	±30	8.58	7.96	56	60	1.72	1.50
PM428S-4R7-RC	4.7	±30	8.12	7.96	55	70	1.55	1.30
PM428S-5R6-RC	5.6	±30	9.56	7.96	69	85	1.38	1.20
PM428S-6R8-RC	6.8	±30	9.624	7.96	77	90	1.30	1.15
PM428S-8R2-RC	8.2	±30	8.24	7.96	45	100	1.25	1.05
PM428S-100-RC	10	±30	11.26	2.52	34	110	1.19	1.00
PM428S-120-RC	12	±30	11.26	2.52	25	125	1.12	0.85
PM428S-150-RC	15	±30	9.66	2.52	27	150	1.03	0.78
PM428S-180-RC	18	±30	11.64	2.52	25	160	0.98	0.75
PM428S-220-RC	22	±30	8.26	2.52	23	185	0.93	0.72
PM428S-270-RC	27	±30	10.76	2.52	18	200	0.89	0.60
PM428S-330-RC	33	±30	9.7	2.52	16	230	0.82	0.58
PM428S-390-RC	39	±30	9.74	2.52	14	250	0.80	0.50
PM428S-470-RC	47	±30	10.88	2.52	13	280	0.75	0.48
PM428S-560-RC	56	±30	9	2.52	13	320	0.70	0.41
PM428S-680-RC	68	±30	8.42	2.52	11	400	0.63	0.36
PM428S-820-RC	82	±30	8.6	2.52	8	520	0.56	0.32
PM428S-101-RC	100	±30	8.78	0.796	9	600	0.51	0.30
PM428S-121-RC	120	±30	13.32	0.796	8	700	0.47	0.28
PM428S-151-RC	150	±30	11.72	0.796	6	860	0.42	0.26
PM428S-181-RC	180	±30	13.86	0.796	7	1000	0.39	0.23

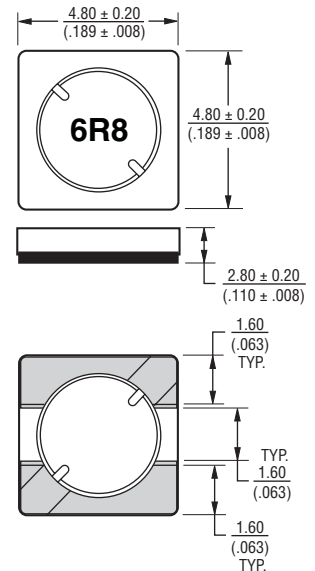
## General Specifications

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.

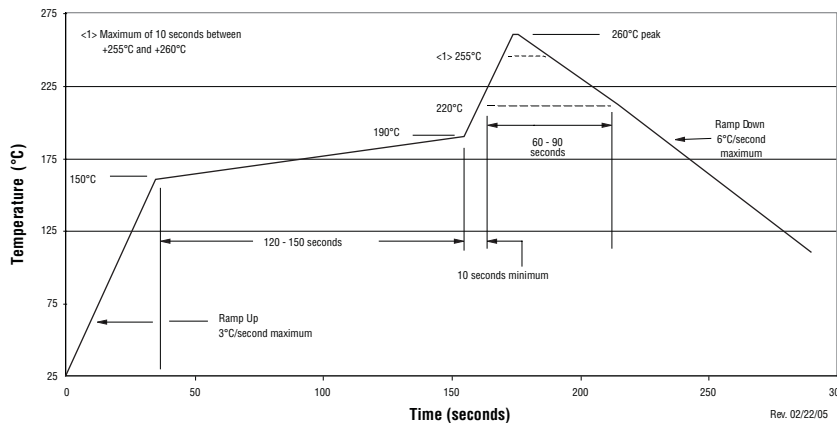
## Materials

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 ..... 30 °C typ. at I<sub>rms</sub>  
 Packaging ..... 2000 pcs. per reel

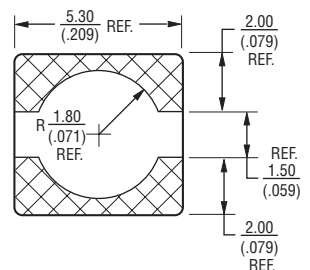
## Product Dimensions



## Soldering Profile



## Recommended Layout



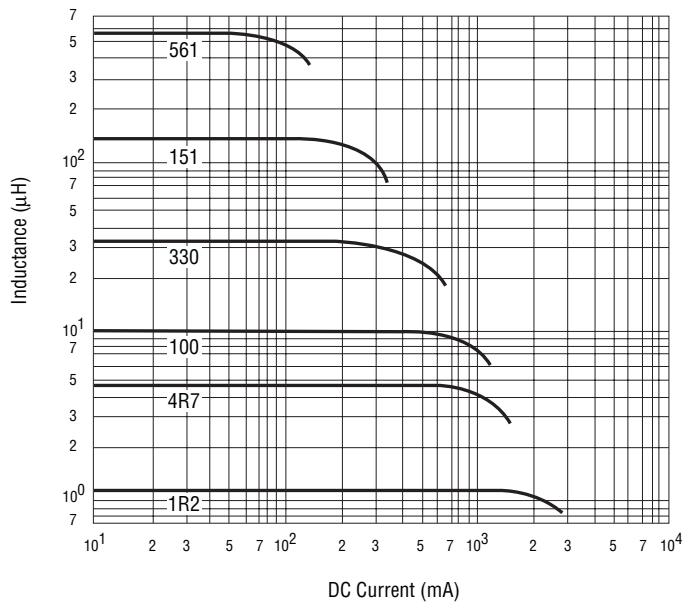
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

\*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex.  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications

# PM428S Series - Shielded SMD Power Inductor

**BOURNS®**

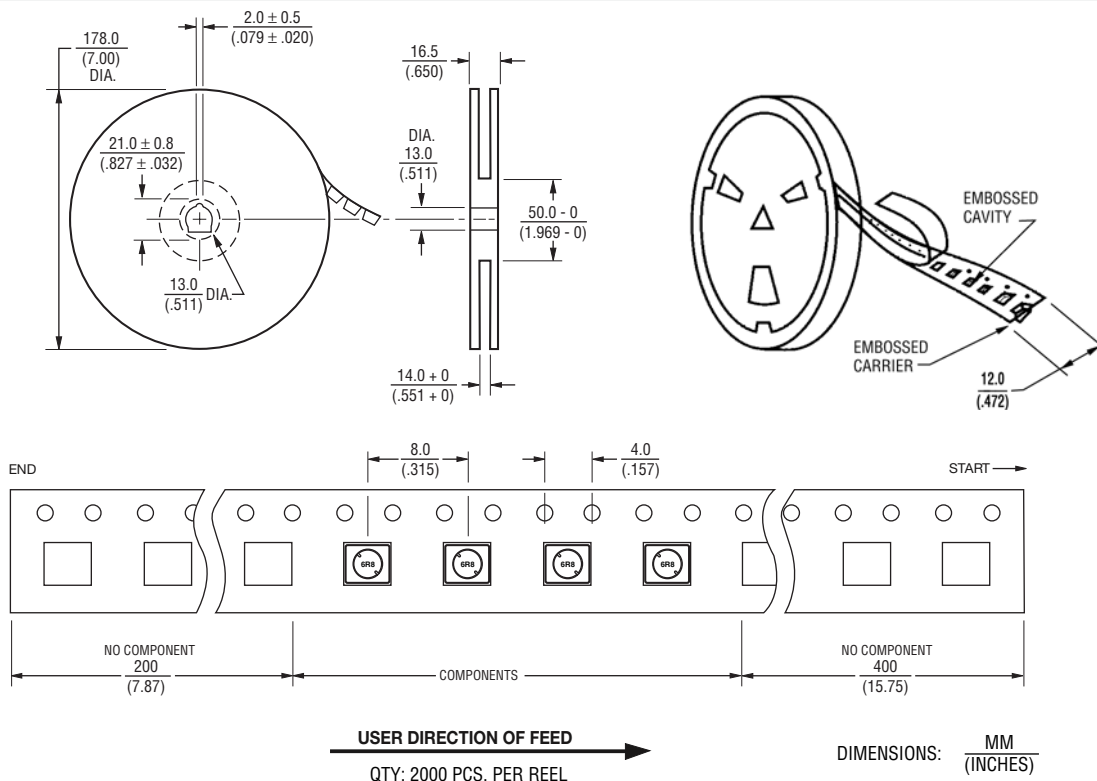
## Inductance vs. Current



## Electrical Schematic



## Packaging Specifications



REV. 03/11

Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications