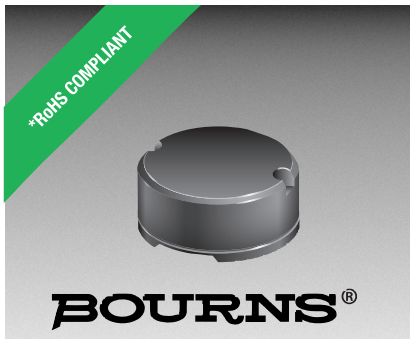




Features

- Formerly **J. W. Miller®** model
- Available in E12 series
- Height of 2.9 mm
- Current rating up to 2.1 A
- RoHS compliant*

Additional Information

Click these links for more information:



PRODUCT
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TECHNICAL
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INVENTORY



SAMPLES



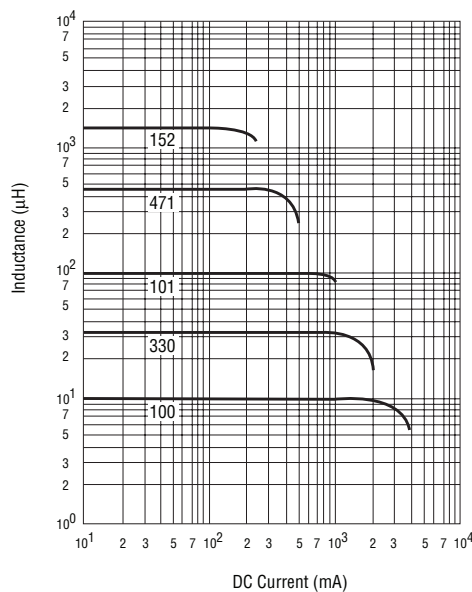
CONTACT

PM105SB Series - Shielded SMD Power Inductor

Electrical Specifications

Bourns Part No.	Inductance 100 kHz		Q Ref.	Test Frequency (MHz)	SRF Typ. (MHz)	DCR Max. (Ω)	Idc (A)
	(μH)	Tol. %					
PM105SB-100M-RC	10	±20	39	2.52	29	0.06	2.1
PM105SB-120M-RC	12	±20	40	2.52	26	0.07	1.9
PM105SB-150M-RC	15	±20	35	2.52	24	0.07	1.7
PM105SB-180M-RC	18	±20	39	2.52	21	0.08	1.6
PM105SB-220M-RC	22	±20	35	2.52	18	0.08	1.4
PM105SB-270M-RC	27	±20	35	2.52	17	0.10	1.3
PM105SB-330L-RC	33	±15	27	2.52	14	0.11	1.2
PM105SB-390L-RC	39	±15	31	2.52	14	0.12	1.1
PM105SB-470L-RC	47	±15	27	2.52	11	0.14	1.0
PM105SB-560L-RC	56	±15	26	2.52	11	0.19	0.93
PM105SB-680L-RC	68	±15	26	2.52	10	0.21	0.85
PM105SB-820L-RC	82	±15	26	2.52	9	0.28	0.79
PM105SB-101K-RC	100	±10	29	1 V / 1 K	8	0.34	0.72
PM105SB-121K-RC	120	±10	31	1 V / 1 K	7	0.37	0.63
PM105SB-151K-RC	150	±10	24	1 V / 1 K	6	0.51	0.55
PM105SB-181K-RC	180	±10	24	1 V / 1 K	5	0.57	0.50
PM105SB-221K-RC	220	±10	27	1 V / 1 K	5	0.78	0.47
PM105SB-271K-RC	270	±10	30	1 V / 1 K	5	0.87	0.41
PM105SB-331K-RC	330	±10	29	1 V / 1 K	4	1.20	0.37
PM105SB-391K-RC	390	±10	26	1 V / 1 K	3	1.34	0.35
PM105SB-471K-RC	470	±10	26	1 V / 1 K	3	1.50	0.33

Inductance vs. Current



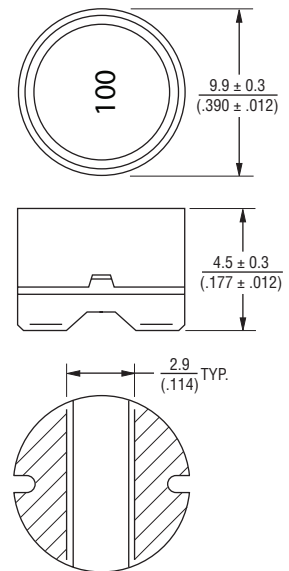
General Specifications

Test Voltage..... 1 Volt
 Operating Temp..... -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature .. -40 °C to +125 °C
 Moisture Sensitivity Level..... 1
 ESD Classification (HBM)..... N/A

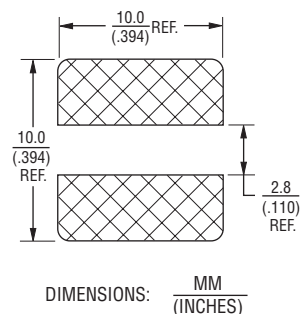
Materials

Core Material..... Ferrite DR & RI
 Wire Enameled Copper
 Terminal..... SnAgCu
 Rated Current..... Ind. drop 10 % typ.
 Temperature Rise 15 °C typ.
 Packaging..... 500 pcs. per reel

Product Dimensions



Recommended Layout



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

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. 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.



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 See www.P65Warnings.ca.gov

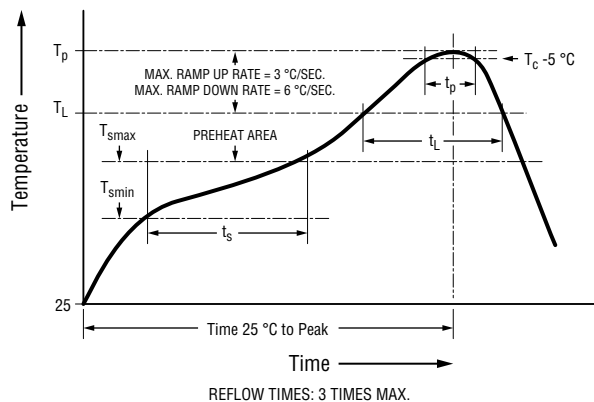
Applications

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

PM105SB Series - Shielded SMD Power Inductor

BOURNS®

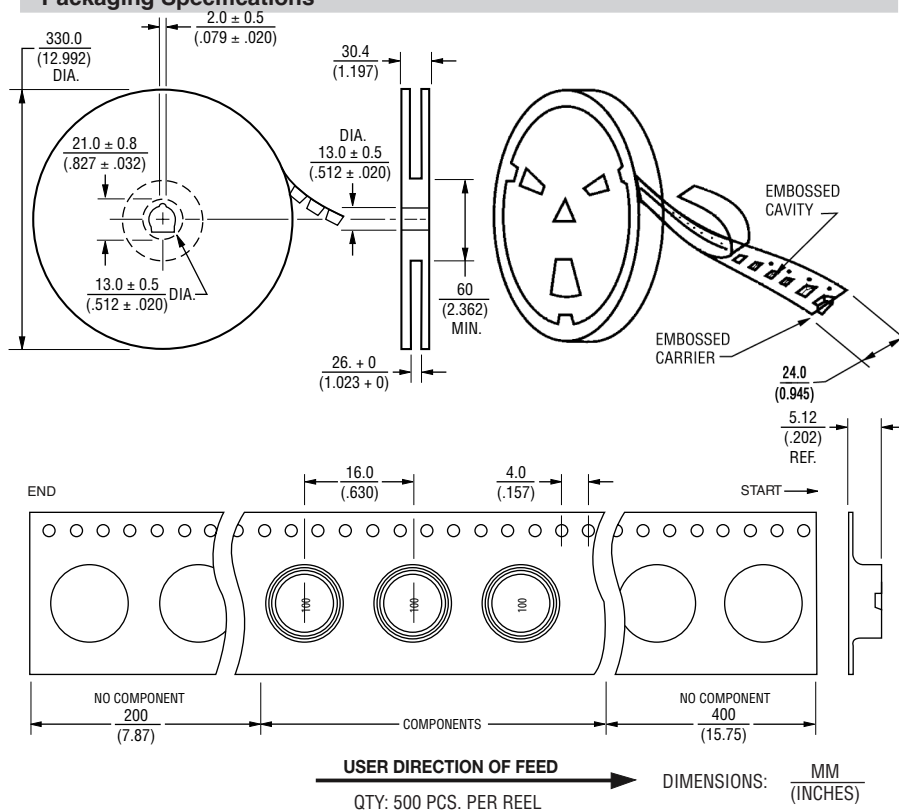
Soldering Profile



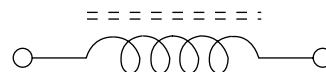
Profile Feature	Pb Free Assembly
Preheat - Temperature Min. (T_{smin}) - Temperature Max. (T_{smax}) - Time (t_s) from T_{smin} to T_{smax}	150 °C 200 °C 60-120 seconds
Ramp-up Rate (T_L to T_p)	3 °C/second max.
Liquidous temperature (T_L) Time (t_L) maintained above T_L	217 °C 60-150 seconds
Classification temperature (T_c)	245 °C
Time (t_p) at $T_c - 5$ °C (T_p should be equal to or less than 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.

Refer to IPC/JEDEC J-STD-020E.

Packaging Specifications



Electrical Schematic



REV. 03/26

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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