



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:

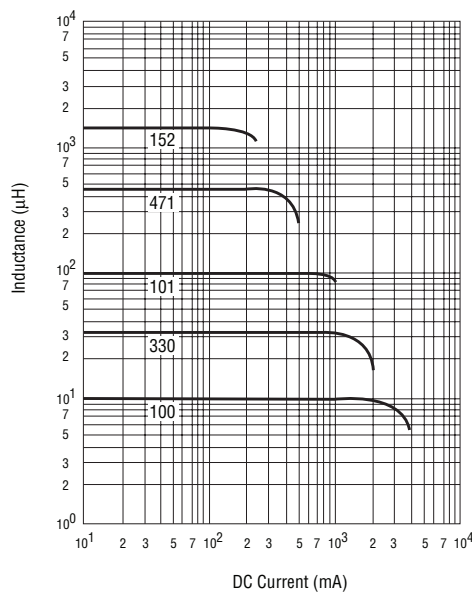


PM105SB Series - Shielded SMD Power Inductor

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



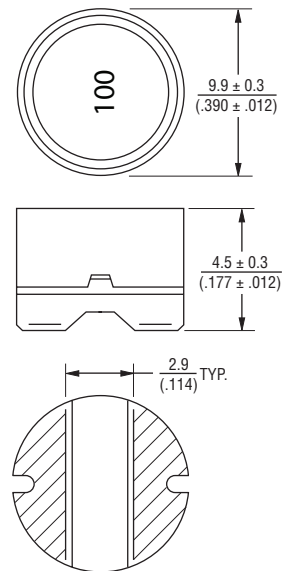
General Specifications

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

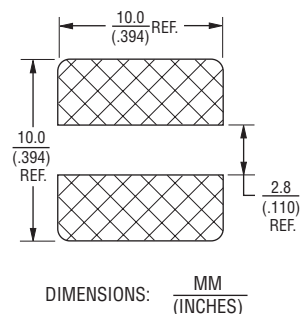
Materials

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



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

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CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant. See www.P65Warnings.ca.gov

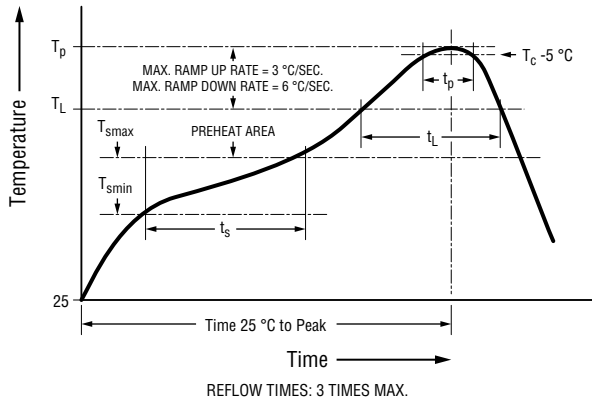
Applications

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

PM105SB Series - Shielded SMD Power Inductor

BOURNS®

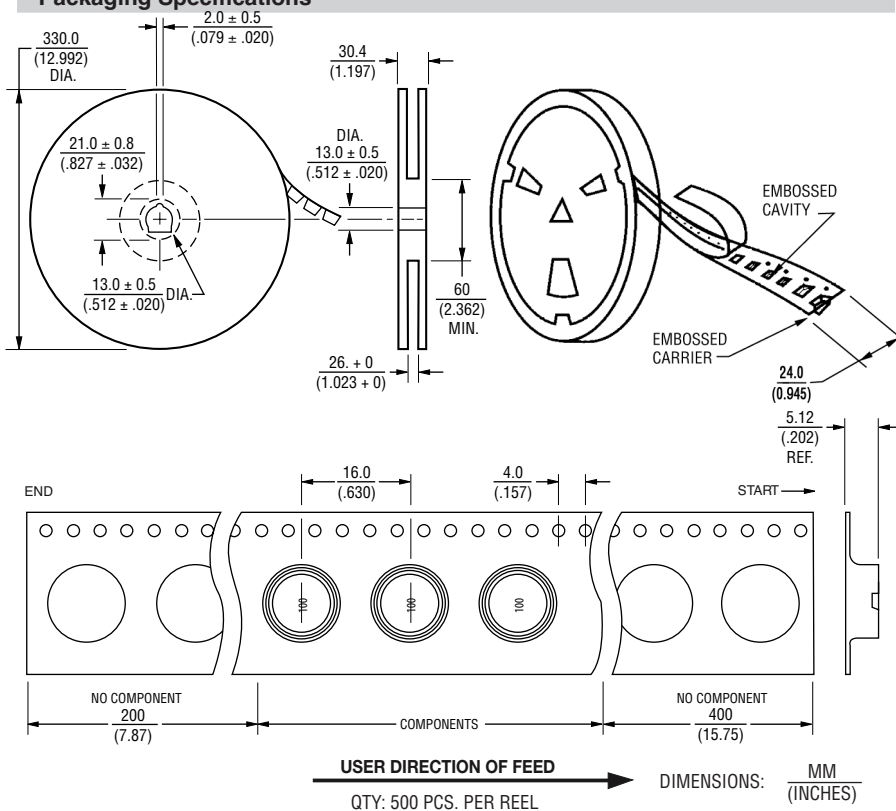
Soldering Profile



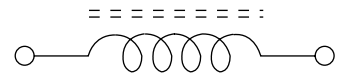
Profile Feature	Pb Free Assembly
Preheat <ul style="list-style-type: none"> - Temperature Min. (T_{smin}) - Temperature Max. (T_{smax}) - Time (t_s) from T_{smin} to T_{smax} 	150 °C 200 °C 60-120 seconds
Ramp-up Rate (T_L to T_p)	3 °C/second max.
Liquidous temperature (T_L) Time (t_L) maintained above 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

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Users should verify actual device performance in their specific applications.

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