



Features

- Formerly **J.W. Miller®** model
- Available in E12 values
- Inductance as low as 1.2 μ H
- Current rating to 6.6 amps
- RoHS compliant*

Applications

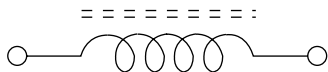
- Input/output of DC-DC converters
- Power supplies for:
 - Portable communication equipment
 - Camcorders
 - LCD TVs

PM127SH Series - Shielded SMD Power Inductors

Electrical Specifications

Bourns Part No.	Inductance 100 kHz		Q Typ.	Test Frequency (MHz)	SRF Typ. (MHz)	RDC Max. (m Ω)	I rms Max. (A)	I sat Typ. (A)
	(μ H)	Tol. %						
PM127SH-1R2N-RC	1.2	-20 to +40	28	7.96	83	7.0	9.80	10.50
PM127SH-2R4N-RC	2.4	-20 to +40	20	7.96	45	10.0	9.20	10.50
PM127SH-3R5N-RC	3.5	-20 to +40	20	7.96	36	12.0	8.80	9.80
PM127SH-4R7N-RC	4.7	-20 to +40	22	7.96	30	15.5	8.20	8.80
PM127SH-6R1N-RC	6.1	-20 to +40	20	7.96	23	18.0	6.60	7.80
PM127SH-7R6N-RC	7.6	-20 to +40	15	7.96	21	20.0	5.90	6.50
PM127SH-100M-RC	10.0	± 20	24	2.52	17	19.5	6.00	6.60
PM127SH-120M-RC	12.0	± 20	26	2.52	15	28.0	5.60	6.30
PM127SH-150M-RC	15.0	± 20	26	2.52	13	28.5	5.20	5.00
PM127SH-180M-RC	18.0	± 20	24	2.52	12	35.0	4.80	4.60
PM127SH-220M-RC	22.0	± 20	20	2.52	11	38.6	4.30	4.10
PM127SH-270M-RC	27.0	± 20	26	2.52	10	52.0	3.90	3.70
PM127SH-330M-RC	33.0	± 20	28	2.52	9.5	57.0	3.50	3.30
PM127SH-390M-RC	39.0	± 20	24	2.52	8.5	70.0	3.20	3.10
PM127SH-470M-RC	47.0	± 20	24	2.52	7.5	80.0	2.90	2.80
PM127SH-560M-RC	56.0	± 20	24	2.52	7.0	100.0	2.60	2.50
PM127SH-680M-RC	68.0	± 20	20	2.52	6.5	120.0	2.40	2.30
PM127SH-820M-RC	82.0	± 20	20	0.796	5.0	130.0	2.30	2.20
PM127SH-101M-RC	100.0	± 20	18	0.796	4.5	150.0	2.10	2.00
PM127SH-121M-RC	120.0	± 20	16	0.796	4.3	200.0	1.95	1.95
PM127SH-151M-RC	150.0	± 20	24	0.796	4.1	270.0	1.85	1.90
PM127SH-181M-RC	180.0	± 20	24	0.796	4.0	300.0	1.75	1.88
PM127SH-221M-RC	220.0	± 20	24	0.796	3.4	400.0	1.60	1.70
PM127SH-271M-RC	270.0	± 20	20	0.796	3.1	450.0	1.20	1.60
PM127SH-331M-RC	330.0	± 20	18	0.796	2.9	600.0	1.10	1.40
PM127SH-391M-RC	390.0	± 20	20	0.796	2.7	680.0	1.60	1.40
PM127SH-471M-RC	470.0	± 20	20	0.796	2.2	880.0	0.90	1.25
PM127SH-561M-RC	560.0	± 20	20	0.796	2.0	960.0	0.80	1.15
PM127SH-681M-RC	680.0	± 20	26	0.796	1.7	1300.0	0.75	0.97
PM127SH-821M-RC	820.0	± 20	20	0.796	1.4	1500.0	0.70	0.94
PM127SH-102M-RC	1000.0	± 20	40	0.252	1.3	1700.0	0.68	0.80

Electrical Schematic



Additional Information

Click these links for more information:



PRODUCT
SELECTOR



TECHNICAL
LIBRARY



INVENTORY

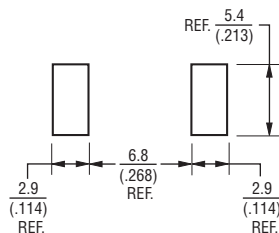


SAMPLES



CONTACT

Recommended Layout



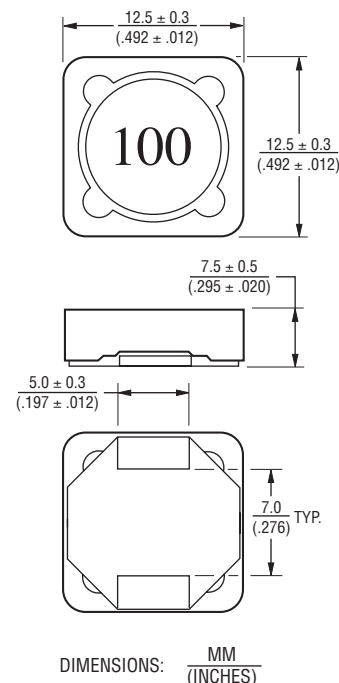
General Specifications

Test Voltage.....0.1 V
 Operating Temperature
-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 Ferrite DR and RI
 Wire Enameled copper wire 130
 Terminal Finish Sn
 Temperature Rise 40 °C typ.
 at rated I_{rms}
 Inductance drop 25 % typ. at I_{sat}
 Packaging 400 pcs. per reel

Product Dimensions



CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant.

See www.P65Warnings.ca.gov

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

Specifications are subject to change without notice.

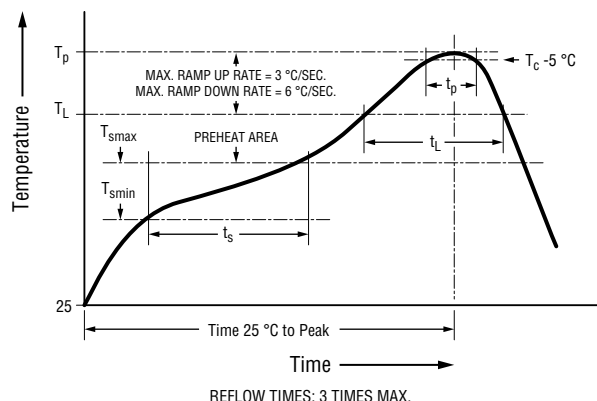
Users should verify actual device performance in their specific applications.

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PM127SH Series - Shielded SMD Power Inductors

BOURNS®

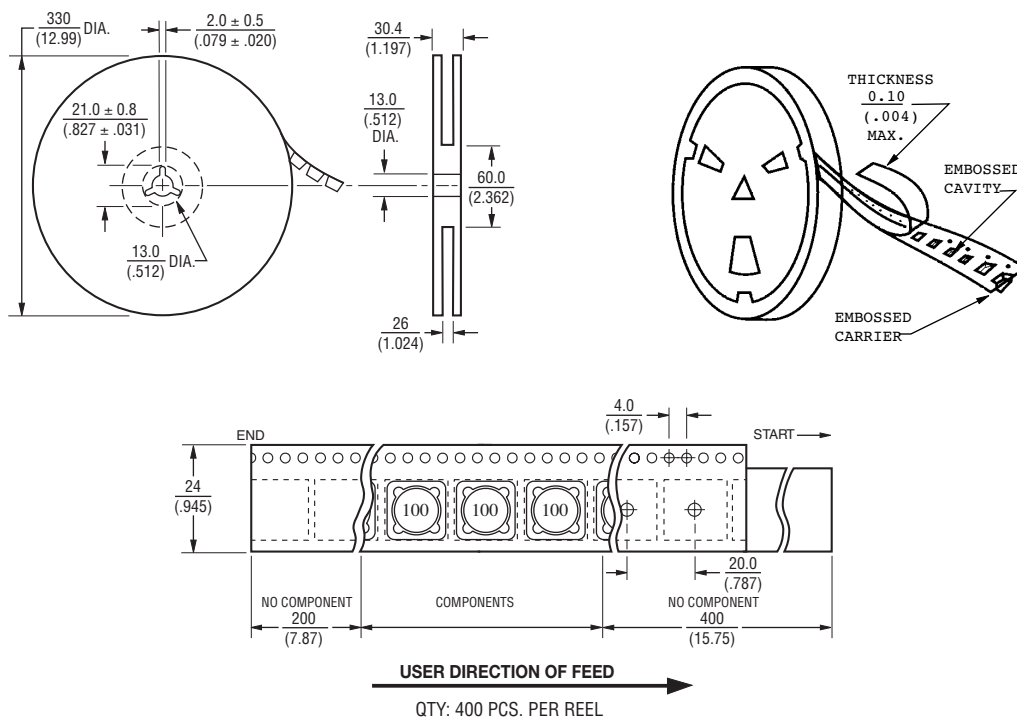
Soldering Profile



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)	217 °C
Time (t_L) maintained above T_L	60-150 seconds
Classification temperature (T_c)	245 °C
Time (t_p) at $T_c - 5\text{ °C}$ (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



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

REV. 03/26

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