



Features

- Formerly **J. W. Miller**® model
- Height of 2.0 mm
- Current rating up to 2.7 A
- RoHS compliant

Additional Information

Click these links for more information:

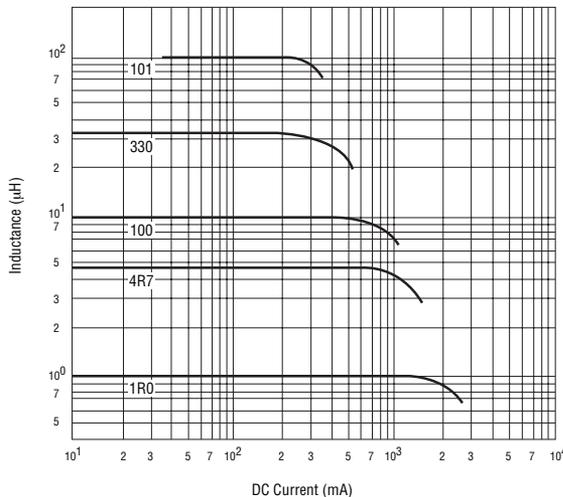


PM42S Series - Shielded SMD Power Inductors

Electrical Specifications

Bourns Part No.	Inductance 100 kHz		Q Ref.	Test Frequency (MHz)	SRF Typ. (MHz)	DCR Max. (mΩ)	I rms (A)	I sat (A)
	(μH)	Tol. %						
PM42S-1R0-RC	1.0	±30	9	7.960	219	35	2.70	2.60
PM42S-2R2-RC	2.2	±30	8	7.960	90	55	2.10	2.10
PM42S-2R7-RC	2.7	±30	8	7.960	78	60	2.03	1.95
PM42S-3R3-RC	3.3	±30	8	7.960	61	65	1.95	1.80
PM42S-3R9-RC	3.9	±30	8	7.960	60	75	1.82	1.65
PM42S-4R7-RC	4.7	±30	8	7.960	55	82	1.72	1.50
PM42S-5R6-RC	5.6	±30	7	7.960	57	90	1.64	1.25
PM42S-6R8-RC	6.8	±30	8	7.960	49	100	1.50	1.15
PM42S-8R2-RC	8.2	±30	7	7.960	40	135	1.40	1.10
PM42S-100-RC	10	±30	10	2.520	38	150	1.30	1.00
PM42S-120-RC	12	±30	9	2.520	32	170	1.15	0.90
PM42S-150-RC	15	±30	8	2.520	30	220	1.03	0.82
PM42S-180-RC	18	±30	7	2.520	30	280	0.92	0.75
PM42S-220-RC	22	±30	7	2.520	29	300	0.88	0.65
PM42S-270-RC	27	±30	7	2.520	23	370	0.77	0.60
PM42S-330-RC	33	±30	7	2.520	21	420	0.73	0.50
PM42S-390-RC	39	±30	8	2.520	19	540	0.64	0.48
PM42S-470-RC	47	±30	8	2.520	20	600	0.62	0.45
PM42S-560-RC	56	±30	8	2.520	15	820	0.52	0.40
PM42S-680-RC	68	±30	7	2.520	13	860	0.50	0.38
PM42S-820-RC	82	±30	8	2.520	13	1200	0.43	0.32
PM42S-101-RC	100	±30	10	0.796	12	1350	0.40	0.30
PM42S-121-RC	120	±30	11	0.796	10	1950	0.33	0.28
PM42S-151-RC	150	±30	14	0.796	10	2600	0.28	0.26
PM42S-181-RC	180	±30	10	0.796	10	4000	0.18	0.25

Inductance vs. Current



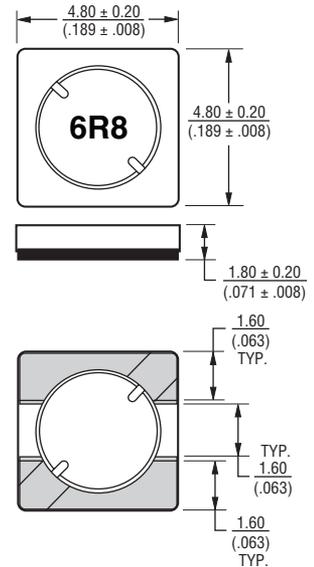
General Specifications

Test Voltage 0.1 V, 100 KHz
 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

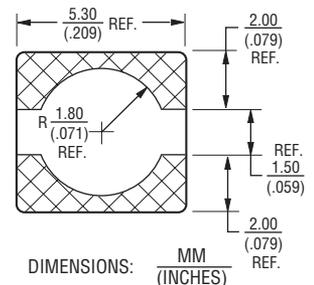
Materials

Core Material Ferrite
 Wire Enameled Copper
 Adhesive..... Epoxy Resin
 Terminal Finish SnAgCu
 Rated Current..... Ind. drop of 35 % typ.
 at Isat
 Temperature Rise 30 °C typ. at Irms
 Packaging..... 1000 pcs. per reel

Product Dimensions



Recommended Layout



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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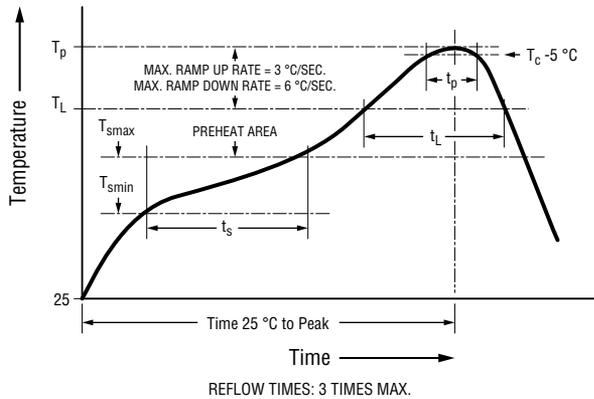
Applications

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

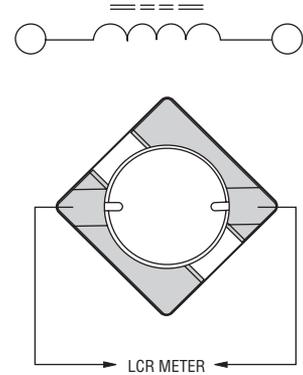
PM42S Series - Shielded SMD Power Inductors

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Soldering Profile



Electrical Schematic



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)	260 °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.

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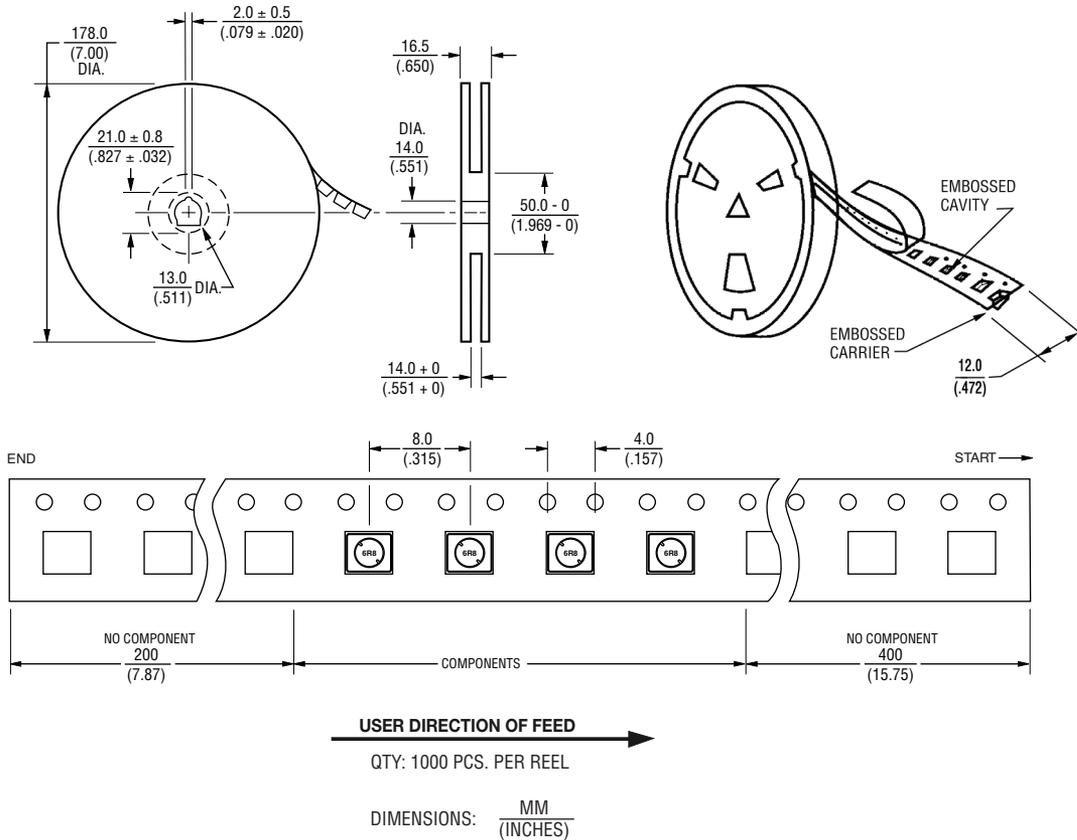
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Packaging Specifications



REV. 03/26

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