

Features

- Formerly J.W. Miller® model
- Height of 4.0 mm max.
- Current rating up to 3.5 A
- RoHS compliant*

Additional Information

Click these links for more information:

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PM638S Series - Shielded SMD Power Inductor

Electrical Specifications

Bourns Part No.	Inductance 100 kHz (µH)	Inductance 100 kHz Tol. %	Q Ref.	Test Frequency (MHz)	SRF Typ. (MHz)	DCR Max. (mΩ)	Irms (A)	Isat (A)
PM638S-3R3-RC	3.3	±30	9.8	7.96	75.9	20	3.50	3.60
PM638S-5R0-RC	5.0	±30	8.9	7.96	42.6	24	2.90	2.95
PM638S-6R2-RC	6.2	±30	9.0	7.96	42.3	27	2.50	2.60
PM638S-7R4-RC	7.4	±30	7.5	7.96	32.9	31	2.30	2.55
PM638S-8R2-RC	8.2	±30	7.4	7.96	29.6	34	2.20	2.45
PM638S-8R7-RC	8.7	±30	7.3	7.96	27.5	34	2.20	2.35
PM638S-100-RC	10	±30	8.8	2.52	24.9	38	2.00	2.05
PM638S-120-RC	12	±30	8.3	2.52	17.9	53	1.70	1.95
PM638S-150-RC	15	±30	8.6	2.52	18.0	57	1.60	1.90
PM638S-180-RC	18	±30	8.0	2.52	13.8	92	1.50	1.70
PM638S-220-RC	22	±30	8.8	2.52	13.9	96	1.30	1.60
PM638S-270-RC	27	±30	7.7	2.52	12.5	109	1.20	1.30
PM638S-330-RC	33	±30	8.6	2.52	12.5	124	1.10	1.20
PM638S-390-RC	39	±30	8.3	2.52	11.8	138	1.00	1.10
PM638S-470-RC	47	±30	8.5	2.52	10.4	155	0.95	1.00
PM638S-560-RC	56	±30	8.2	2.52	8.8	202	0.85	0.90
PM638S-680-RC	68	±30	7.4	2.52	7.5	234	0.75	0.87
PM638S-820-RC	82	±30	7.6	2.52	7.6	324	0.70	0.75
PM638S-101-RC	100	±30	6.7	0.796	6.2	358	0.65	0.68

General Specifications

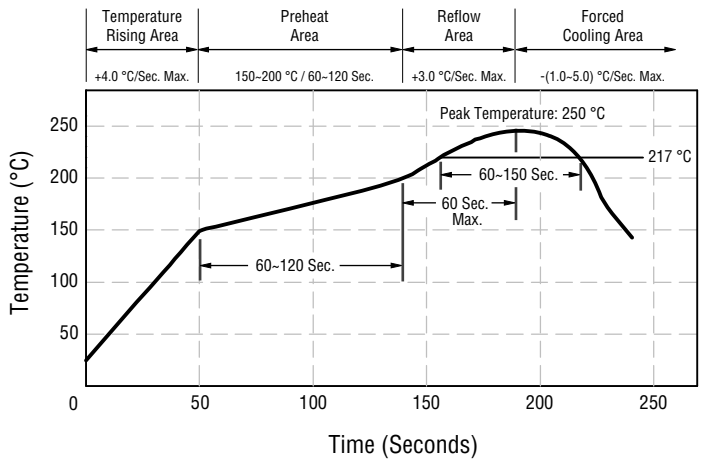
Test Voltage ..... 0.1 V, 100 KHz
Operating Temp. .....-40 °C to +125 °C
(Temperature rise included)
Storage Temperature .. -40 °C to +125 °C
Moisture Sensitivity Level 1
ESD Classification (HBM)..... N/A

Materials

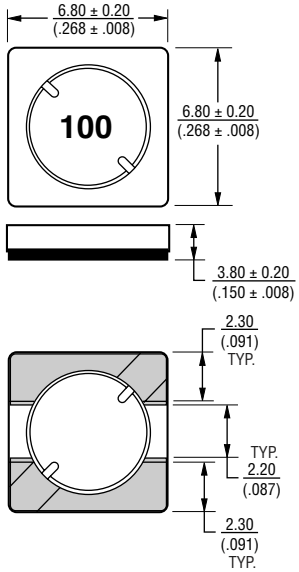
Core Material .....Ferrite
Wire .....Enameled Copper
Adhesive.....Epoxy Resin
Terminal Finish .....SnAgCu
Rated Current.....Ind. drop of 35 % typ. at Isat
Temperature Rise ..... 30 °C typ. at Irms
Packaging..... 1000 pcs. per reel

Soldering Profile

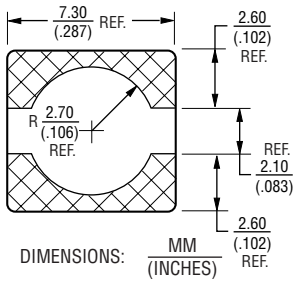
Peak Temperature: 250 °C max.
Max. Peak Temperature -5 °C: 30 sec. max.
Max. Time Above 217 °C: 60~150 sec. max.



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.
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Applications

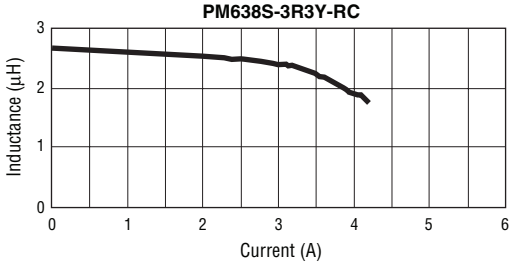
- Input/output of DC-DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

PM638S Series - Shielded SMD Power Inductor

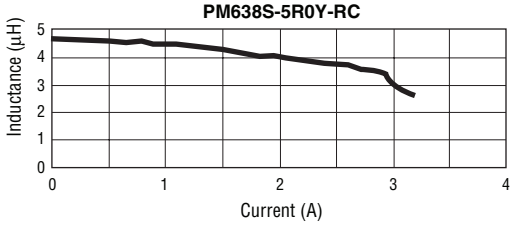
BOURNS®

Inductance vs. Current

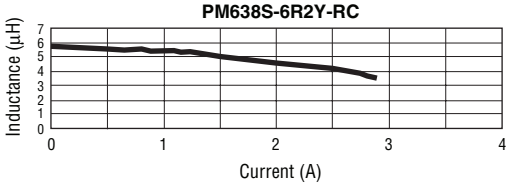
PM638S-3R3Y-RC



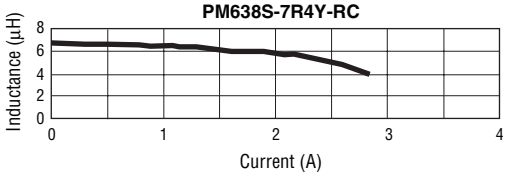
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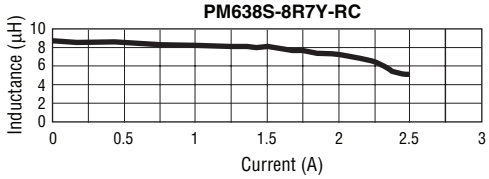
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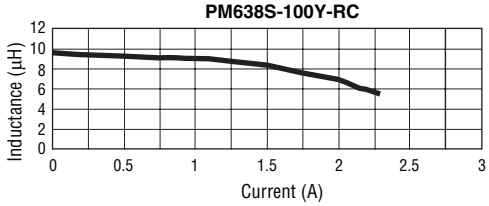
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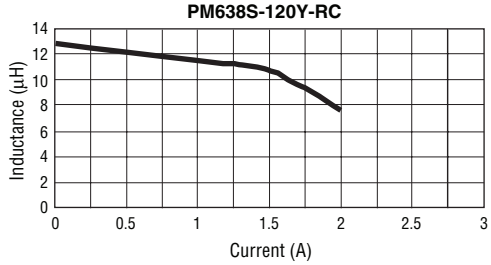
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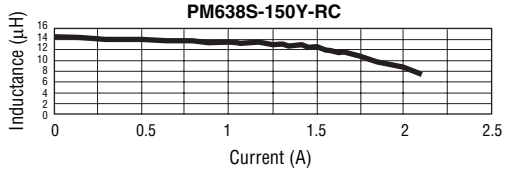
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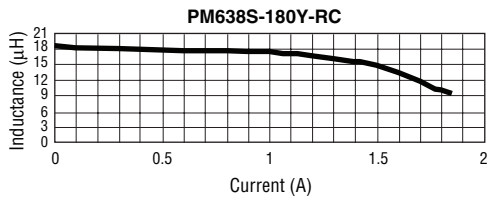
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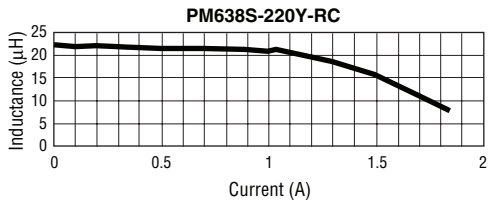
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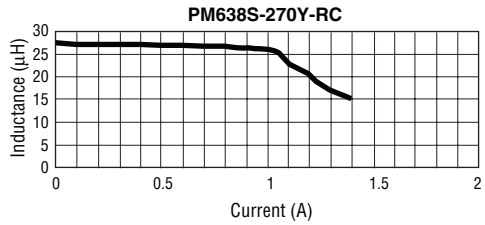
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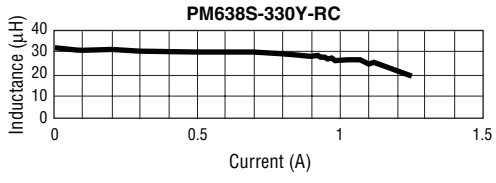
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PM638S-270Y-RC

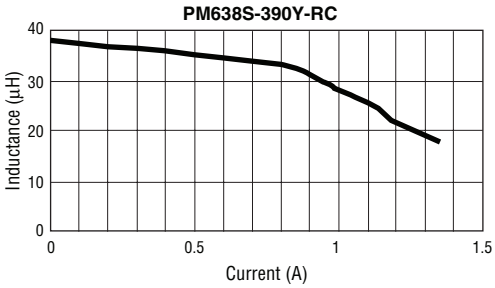


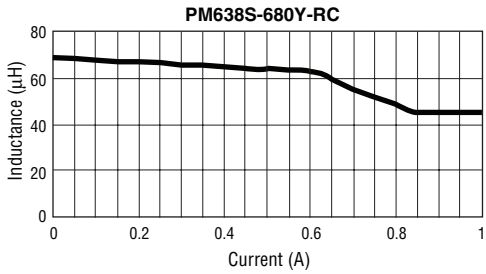
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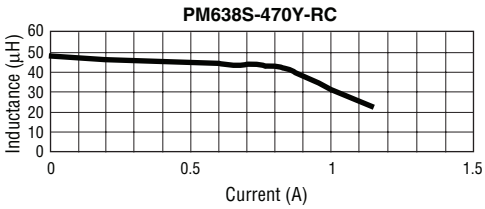


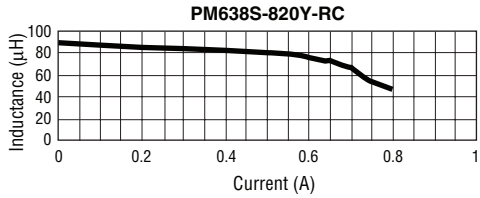
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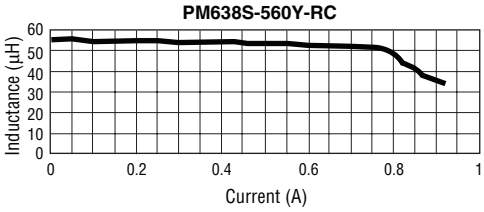
Inductance vs. Current

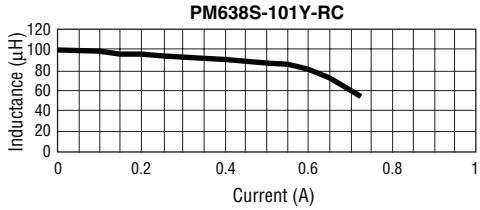




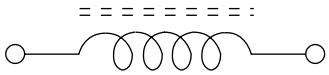


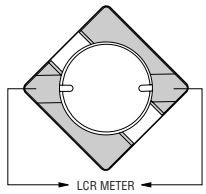






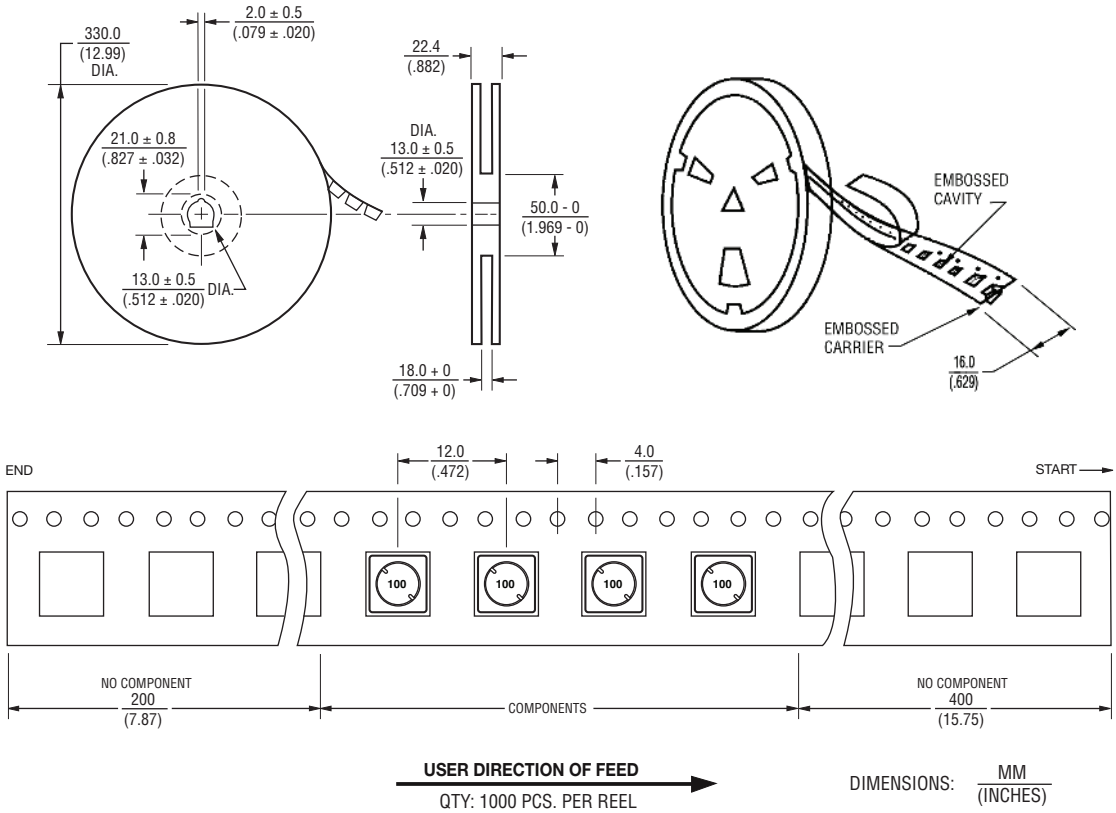
Electrical Schematic





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Packaging Specifications



REV. 06/26

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