



Features

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

Applications

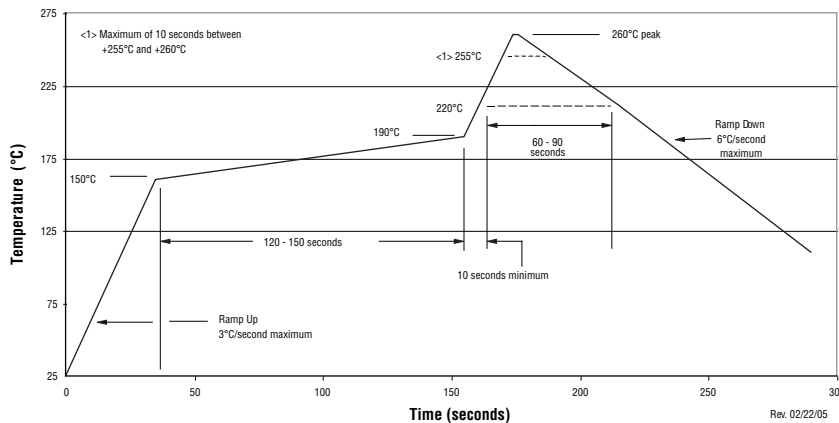
- Input/output of DC/DC converters
- Power supplies for:
 - Portable communication equipment
 - Camcorders
 - LCD TVs
 - Car radios

PM638S Series - Shielded SMD Power Inductor

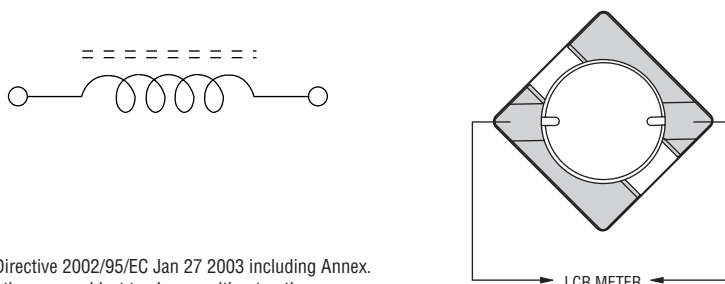
Electrical Specifications

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. %						
PM638S-3R3Y-RC	3.3	±30	9.8	7.96	75.9	20	3.50	3.60
PM638S-5R0Y-RC	5.0	±30	8.9	7.96	42.6	24	2.90	2.95
PM638S-6R2Y-RC	6.2	±30	9.0	7.96	42.3	27	2.50	2.60
PM638S-7R4Y-RC	7.4	±30	7.5	7.96	32.9	31	2.30	2.55
PM638S-8R2Y-RC	8.2	±30	7.4	7.96	29.6	34	2.20	2.45
PM638S-8R7Y-RC	8.7	±30	7.3	7.96	27.5	34	2.20	2.35
PM638S-100Y-RC	10	±30	8.8	2.52	24.9	38	2.00	2.05
PM638S-120Y-RC	12	±30	8.3	2.52	17.9	53	1.70	1.95
PM638S-150Y-RC	15	±30	8.6	2.52	18.0	57	1.60	1.90
PM638S-180Y-RC	18	±30	8.0	2.52	13.8	92	1.50	1.70
PM638S-220Y-RC	22	±30	8.8	2.52	13.9	96	1.30	1.60
PM638S-270Y-RC	27	±30	7.7	2.52	12.5	109	1.20	1.30
PM638S-330Y-RC	33	±30	8.6	2.52	12.5	124	1.10	1.20
PM638S-390Y-RC	39	±30	8.3	2.52	11.8	138	1.00	1.10
PM638S-470Y-RC	47	±30	8.5	2.52	10.4	155	0.95	1.00
PM638S-560Y-RC	56	±30	8.2	2.52	8.8	202	0.85	0.90
PM638S-680Y-RC	68	±30	7.4	2.52	7.5	234	0.75	0.87
PM638S-820Y-RC	82	±30	7.6	2.52	7.6	324	0.70	0.75
PM638S-101Y-RC	100	±30	6.7	0.796	6.2	358	0.65	0.68

Soldering Profile



Electrical Schematic



*RoHS Directive 2002/95/EC Jan 27 2003 including Annex. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications

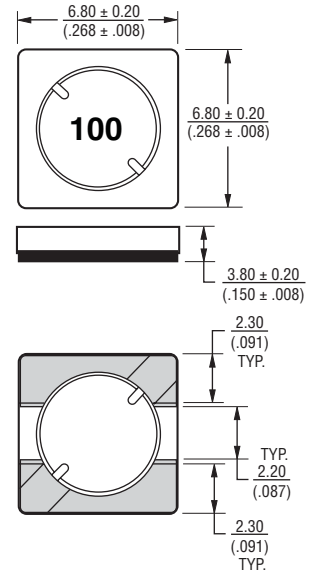
General Specifications

Test Voltage 0.1 V, 100 KHz
 Reflow Soldering 230 °C; 50 sec max.
 Operating Temperature
 -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature .. -40 °C to +125 °C
 Resistance to Soldering Heat
 260 °C for 10 sec.

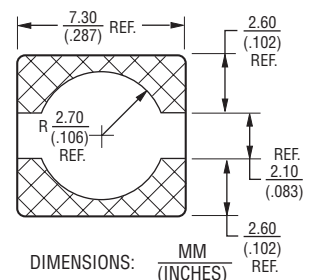
Materials

Core Material Ferrite
 Wire Enameled Copper
 Adhesive Epoxy Resin
 Terminal Ag/Ni/Sn
 Rated Current Ind. drop of 35 % typ.
 at I_{sat}
 Temperature Rise 30 °C typ. at I_{rms}
 Packaging 1000 pcs. per reel

Product Dimensions



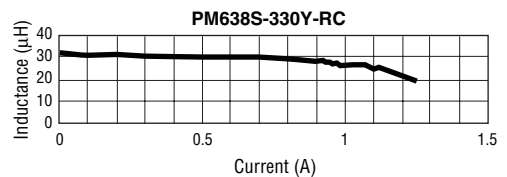
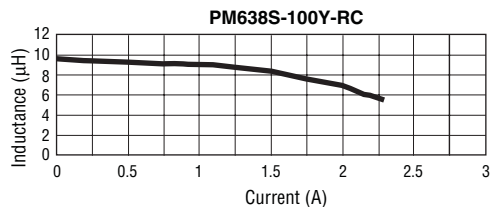
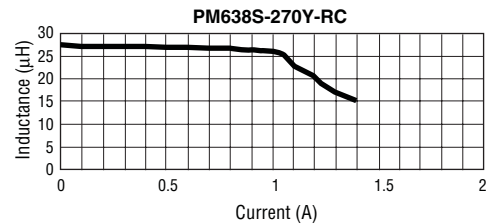
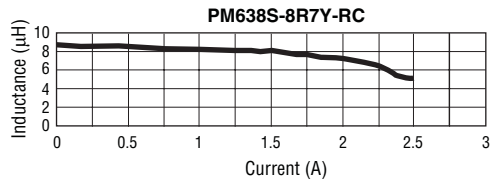
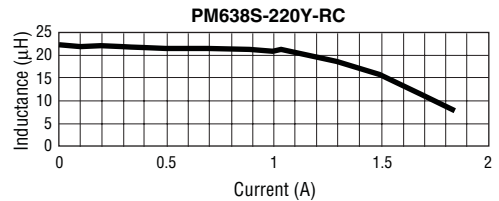
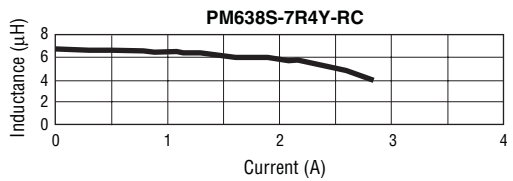
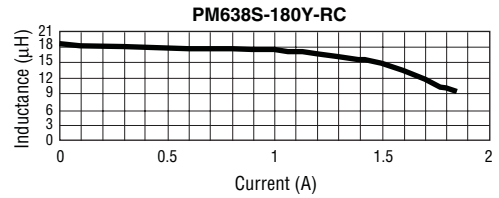
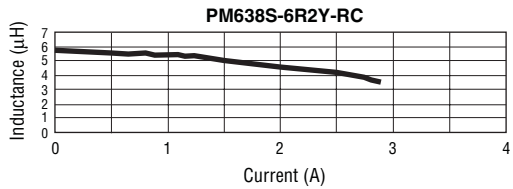
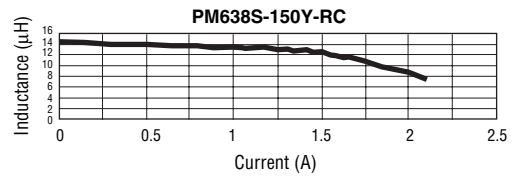
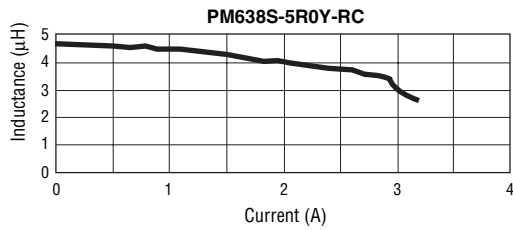
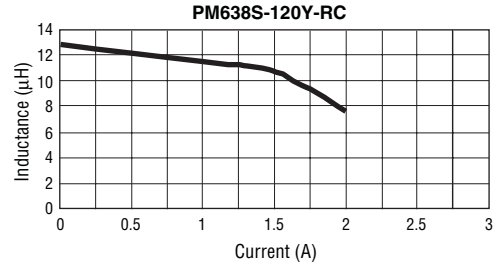
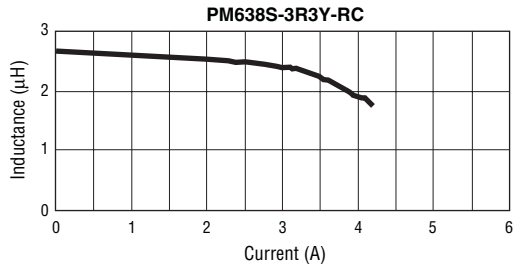
Recommended Layout



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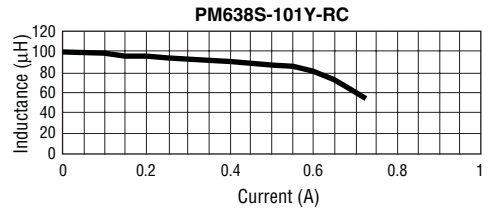
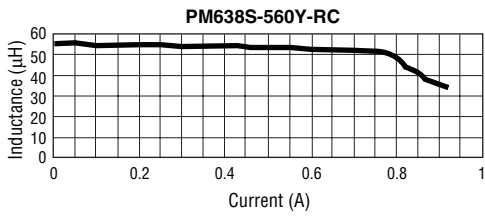
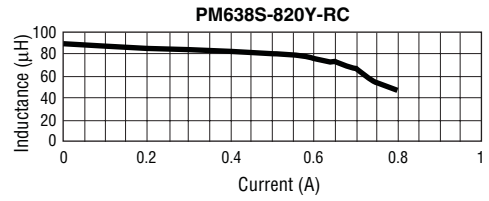
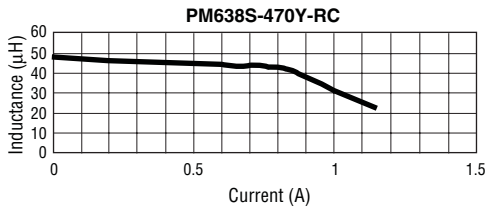
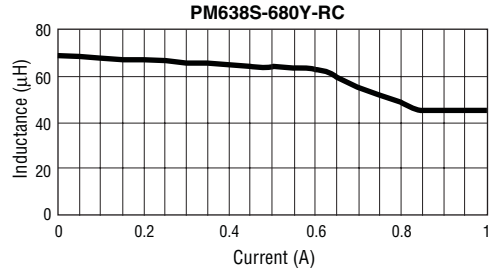
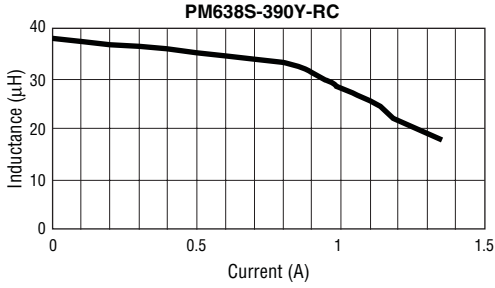
Inductance vs. Current



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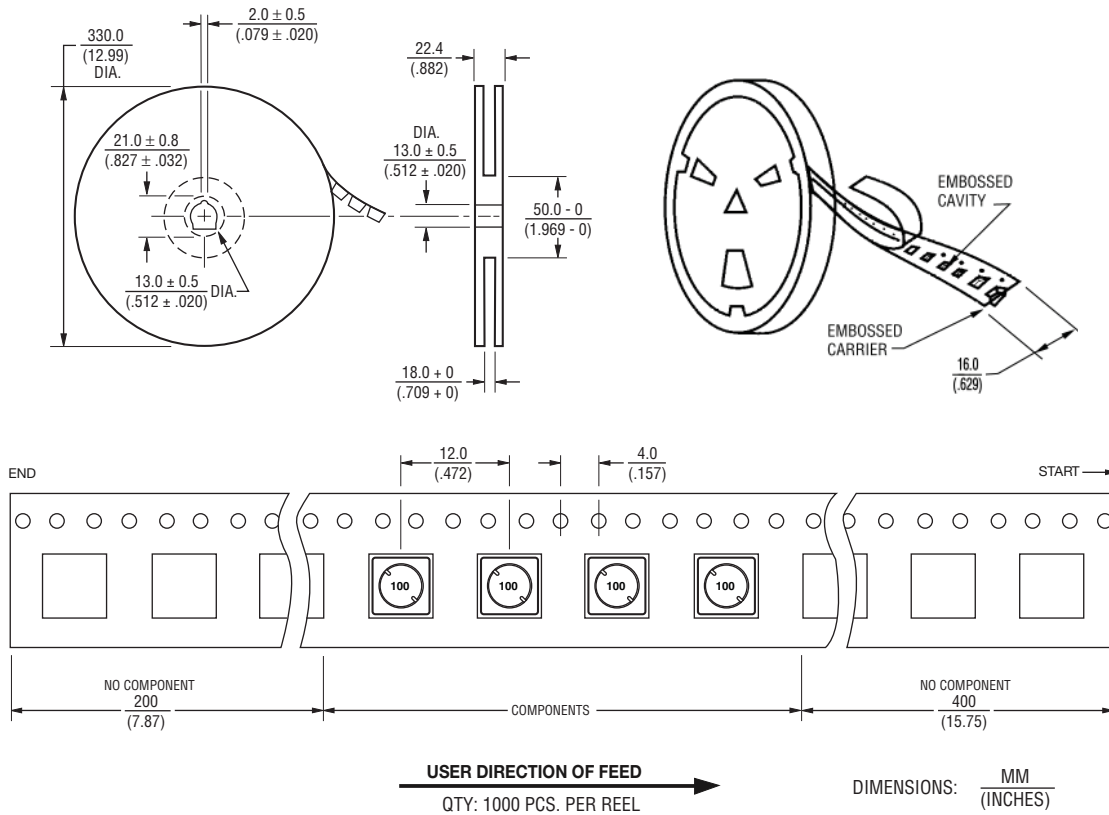
Inductance vs. Current



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Packaging Specifications



REV. 10/08

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