

**NEW!**

# SMT Power Inductors—Series MSS1038



The MSS1038 series provides very high efficiency and excellent current handling capability in a rugged, low cost part. The magnetic shielding, small footprint and low profile allow high density mounting. The flat top ensures reliable pick and place handling.

These inductors are ideal for use in DC-DC converters, LCD panels, and portable devices where low cost and high reliability are critical. They are available in 30 inductance values from 1.5  $\mu\text{H}$  to 1000  $\mu\text{H}$ .

Coilcraft **Designer's Kit C391** contains samples of all values shown. To order, contact Coilcraft or purchase online at <http://order.coilcraft.com>.

Part number <sup>1</sup>	L <sup>2</sup> $\pm 30\%$ ( $\mu\text{H}$ )	DCR max (mOhms)	SRF typ <sup>3</sup> (MHz)	Isat <sup>4</sup> (A)	Irms (A) <sup>5</sup>	
					20°C rise	40°C rise
MSS1038-152NL_	1.5	8.1	81	8.30	5.60	7.85
MSS1038-252NL_	2.5	10.0	61	7.50	4.65	6.65
MSS1038-382NL_	3.8	13.0	45	6.00	4.25	6.05
MSS1038-522NL_	5.2	22.0	37	5.50	3.60	5.10
MSS1038-702NL_	7.0	27.0	33	4.80	3.10	4.35
MSS1038-103NL_	10.0	35.0	29	4.40	2.90	4.05
MSS1038-123NL_	12.0	41.0	25	4.02	2.85	4.00
MSS1038-153NL_	15.0	50.0	21	3.60	2.70	3.80
MSS1038-183NL_	18.0	65.0	18	3.20	2.25	3.35
MSS1038-223NL_	22.0	73.0	15	2.90	1.90	2.85
MSS1038-273NL_	27.0	89.0	15	2.54	1.65	2.35
MSS1038-333NL_	33.0	93.0	13	2.30	1.60	2.30
MSS1038-393NL_	39.0	112.0	12	2.20	1.55	2.25
MSS1038-473NL_	47.0	128.0	11	2.10	1.45	2.20
MSS1038-563NL_	56.0	180.0	11	1.92	1.40	1.85
MSS1038-683NL_	68.0	213.0	10	1.50	1.15	1.75
MSS1038-823NL_	82.0	261.0	8	1.40	1.09	1.50
MSS1038-104NL_	100.0	304.0	6	1.35	1.05	1.45
MSS1038-124NL_	120.0	380.0	6	1.23	0.85	1.25
MSS1038-154NL_	150.0	506.0	6	1.15	0.80	1.20
MSS1038-184NL_	180.0	582.0	5	1.05	0.71	0.98
MSS1038-224NL_	220.0	756.0	5	0.92	0.70	0.97
MSS1038-274NL_	270.0	926.0	4	0.83	0.65	0.86
MSS1038-334NL_	330.0	1090.0	4	0.70	0.50	0.69
MSS1038-394NL_	390.0	1141.0	4	0.64	0.49	0.65
MSS1038-474NL_	470.0	1243.0	3	0.58	0.45	0.63
MSS1038-564NL_	560.0	1696.0	3	0.53	0.43	0.59
MSS1038-684NL_	680.0	1926.0	3	0.48	0.36	0.50
MSS1038-824NL_	820.0	2596.0	3	0.44	0.34	0.47
MSS1038-105NL_	1000.0	2853.0	3	0.40	0.33	0.45

1. When ordering, please specify **packaging** code:

**MSS1038-105NL C**

**Packaging: C** = 7" machine-ready reel. EIA-481 embossed plastic tape (250 parts per full reel).

**B** = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter C instead.

**D** = 13" machine-ready reel. EIA-481 embossed plastic tape (1000 parts per full reel).

2. Inductance measured at 100 kHz, 0.1 V<sub>rms</sub>, 0 Adc.  
 3. SRF measured using an Agilent/HP 4192A or equivalent.  
 4. DC current at which the inductance drops 35% max from its value without current.  
 5. Average current for temperature rise from 25°C ambient.  
 6. Operating temperature range -40°C to +85°C.  
 7. Electrical specifications at 25°C.

## Coilcraft®

Specifications subject to change without notice.  
 Please check our website for latest information.

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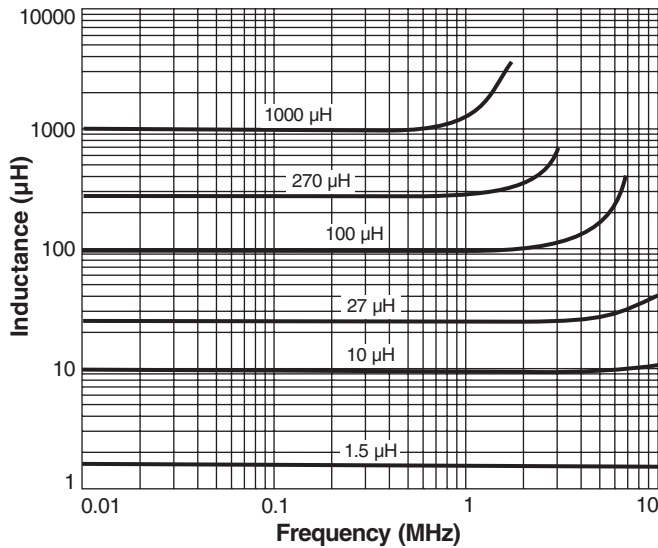
E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>

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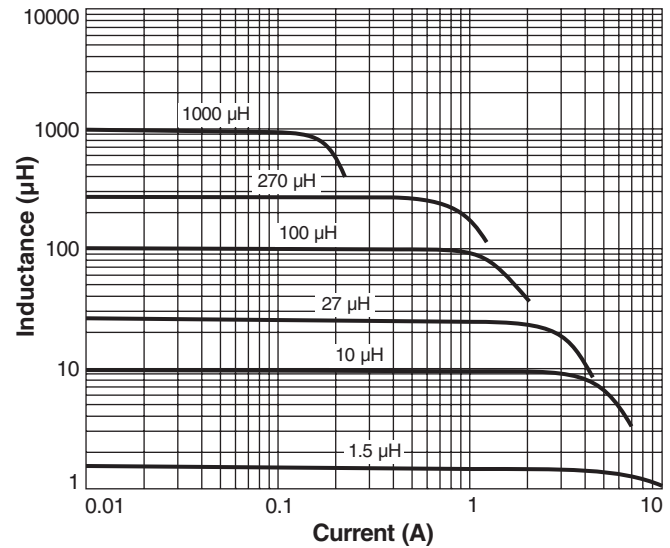


# SMT Power Inductors – Series MSS1038

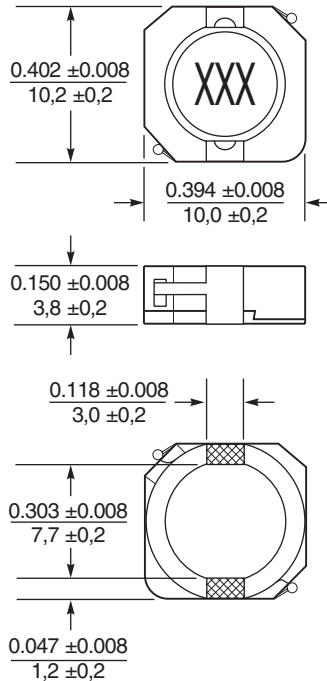
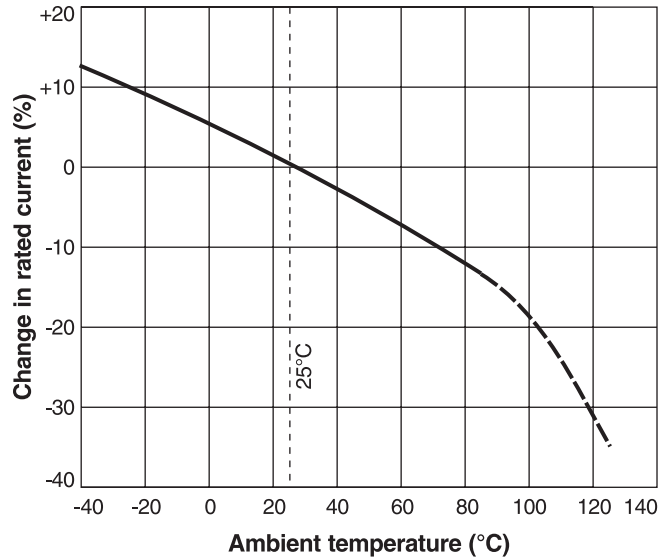
Typical L vs Frequency



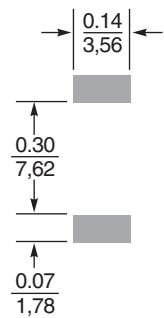
Typical L vs Current



Current Derating



Recommended Land Pattern



**Terminations:** Nickel/tin over copper  
**Weight:** 1.5 g  
**Tape and reel:** 250/7" reel; 1000/13" reel 24 mm tape width  
 For packaging data see Tape and Reel Specifications section.



Specifications subject to change without notice. Please check our website for latest information.

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