

**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  $\mu\text{H}$ .

Free evaluation samples are available by contacting Coilcraft or on the web at [www.coilcraft.com](http://www.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
MSS1038-152NX_	1.5	8.1	81	8.30	5.60	7.85
MSS1038-252NX_	2.5	10.0	61	7.50	4.65	6.65
MSS1038-382NX_	3.8	13.0	45	6.00	4.25	6.05
MSS1038-522NX_	5.2	22.0	37	5.50	3.60	5.10
MSS1038-702NX_	7.0	27.0	33	4.80	3.10	4.35
MSS1038-103NX_	10.0	35.0	29	4.40	2.90	4.05
MSS1038-123NX_	12.0	41.0	25	4.02	2.85	4.00
MSS1038-153NX_	15.0	50.0	21	3.60	2.70	3.80
MSS1038-183NX_	18.0	65.0	18	3.20	2.25	3.35
MSS1038-223NX_	22.0	73.0	15	2.90	1.90	2.85
MSS1038-273NX_	27.0	89.0	15	2.54	1.65	2.35
MSS1038-333NX_	33.0	93.0	13	2.30	1.60	2.30
MSS1038-393NX_	39.0	112.0	12	2.20	1.55	2.25
MSS1038-473NX_	47.0	128.0	11	2.10	1.45	2.20
MSS1038-563NX_	56.0	180.0	11	1.92	1.40	1.85
MSS1038-683NX_	68.0	213.0	10	1.50	1.15	1.75
MSS1038-823NX_	82.0	261.0	8	1.40	1.09	1.50
MSS1038-104NX_	100.0	304.0	6	1.35	1.05	1.45
MSS1038-124NX_	120.0	380.0	6	1.23	0.85	1.25
MSS1038-154NX_	150.0	506.0	6	1.15	0.80	1.20
MSS1038-184NX_	180.0	582.0	5	1.05	0.71	0.98
MSS1038-224NX_	220.0	756.0	5	0.92	0.70	0.97
MSS1038-274NX_	270.0	926.0	4	0.83	0.65	0.86
MSS1038-334NX_	330.0	1090.0	4	0.70	0.50	0.69
MSS1038-394NX_	390.0	1141.0	4	0.64	0.49	0.65
MSS1038-474NX_	470.0	1243.0	3	0.58	0.45	0.63
MSS1038-564NX_	560.0	1696.0	3	0.53	0.43	0.59
MSS1038-684NX_	680.0	1926.0	3	0.48	0.36	0.50
MSS1038-824NX_	820.0	2596.0	3	0.44	0.34	0.47
MSS1038-105NX_	1000.0	2853.0	3	0.40	0.33	0.45

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

#### MSS1038-105NX 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 Vrms, 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.

Document 378-1 Revised 01/06/05

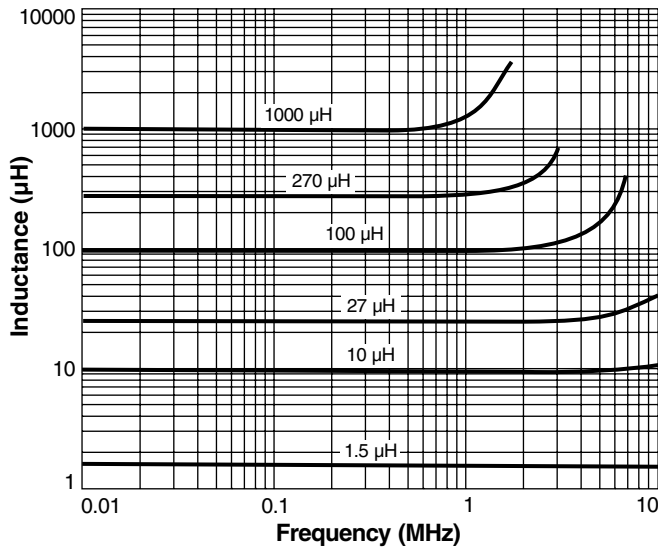
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

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

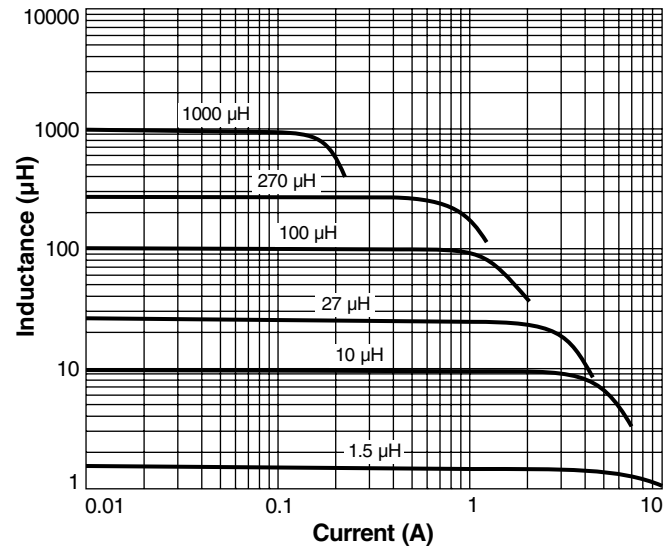
**NEW!**

# SMT Power Inductors – Series MSS1038

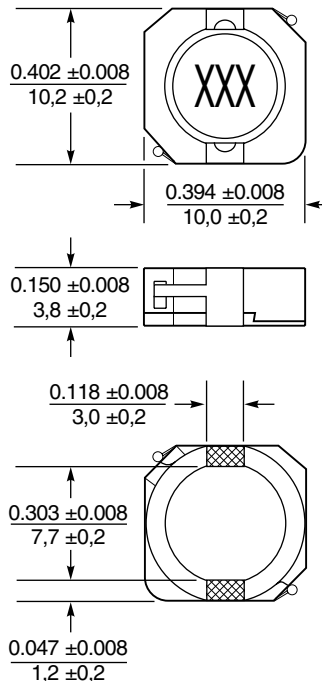
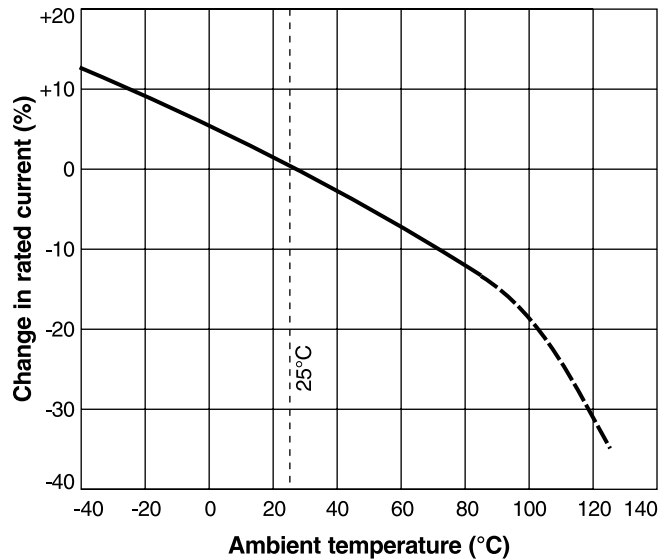
Typical L vs Frequency



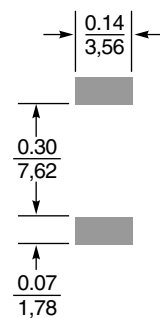
Typical L vs Current



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.

**Coilcraft**®

Specifications subject to change without notice. Please check our website for latest information. Document 378-2 Revised 01/06/05

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469  
 E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>