

NEW!

SMT Power Inductors - MSS4020 Series



These magnetically shielded power inductors are the smallest of our MSS families, measuring only 4 mm square and 2 mm high. They were developed for applications with limited board space or where height is a factor.

They are ideal for use in DC-DC converters, LCD panels, and portable devices where low cost and high reliability are critical. These parts feature high SRFs and have excellent current handling capabilities for their size. They are available in 18 inductance values from 3.3 μ H to 100 μ H.

In addition to the standard values shown, Coilcraft can custom-engineer versions to meet specific applications.

Coilcraft **Designer's Kit C181** contains samples of all values shown. To order, contact Coilcraft or purchase on-line at <http://order.coilcraft.com>.

SPICE models ON OUR WEB SITE OR CD

Part number ¹	L $\pm 20\%$ ² (μ H)	DCR max (Ohms)	SRF ³ typ (MHz)	I _{sat} ⁴ (A)	I _{rms} ⁵ (A)
MSS4020-332MX_	3.3	0.085	109.0	1.10	1.10
MSS4020-472MX_	4.7	0.115	93.0	0.80	0.80
MSS4020-562MX_	5.6	0.130	85.0	0.73	0.73
MSS4020-682MX_	6.8	0.175	75.0	0.66	0.66
MSS4020-822MX_	8.2	0.190	70.0	0.60	0.60
MSS4020-103MX_	10	0.210	63.0	0.54	0.54
MSS4020-123MX_	12	0.280	55.0	0.50	0.50
MSS4020-153MX_	15	0.330	50.0	0.44	0.44
MSS4020-183MX_	18	0.360	42.0	0.40	0.40
MSS4020-223MX_	22	0.480	38.0	0.36	0.36
MSS4020-273MX_	27	0.560	35.0	0.32	0.32
MSS4020-333MX_	33	0.620	28.0	0.30	0.30
MSS4020-393MX_	39	0.820	30.0	0.27	0.27
MSS4020-473MX_	47	0.930	28.0	0.25	0.25
MSS4020-563MX_	56	1.200	22.0	0.23	0.23
MSS4020-683MX_	68	1.330	18.0	0.20	0.20
MSS4020-823MX_	82	1.500	17.0	0.19	0.19
MSS4020-104MX_	100	2.100	15.0	0.17	0.17

1. When ordering, please specify packaging code:

MSS4020-104MX D

Packaging: **D** = 13" machine-ready reel. EIA-481 embossed plastic tape (2000 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 D instead.

2. Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc using a Coilcraft SMD-A fixture in an Agilent/HP 4284A impedance analyzer.

3. SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.

4. DC current at which the inductance drops 20% (typ) from its value without current.

5. Average current for a 15°C (max) rise above 25°C ambient.

6. Storage and ambient operating temperature range -40°C to +85°C.

7. Electrical specifications at 25°C.

See Qualification Standards section for environmental and test data.

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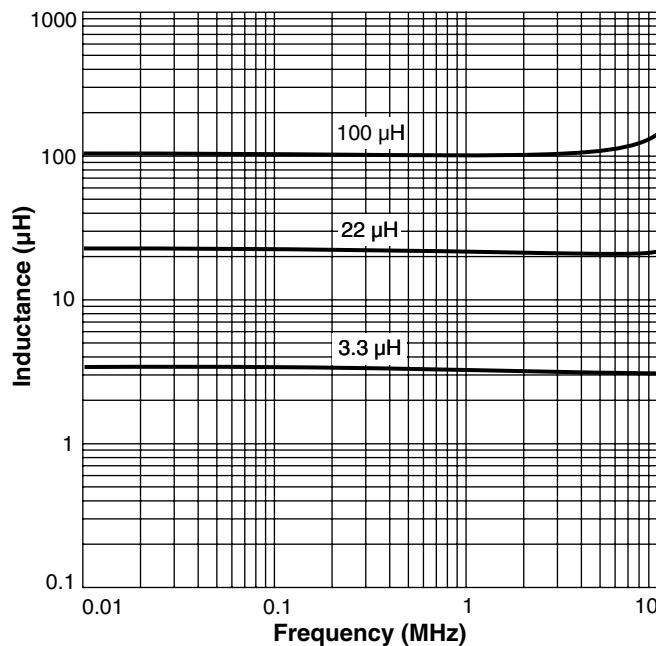
Specifications subject to change without notice.
Please check our website for latest information. Document 329-1 Revised 12/28/04

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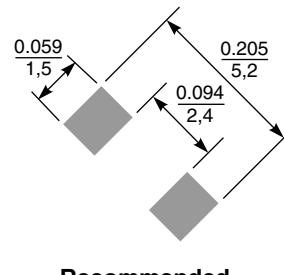
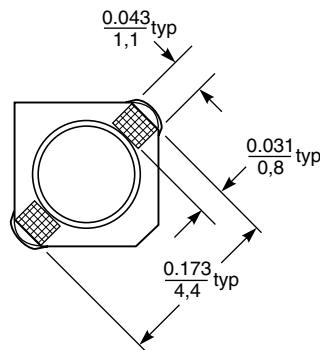
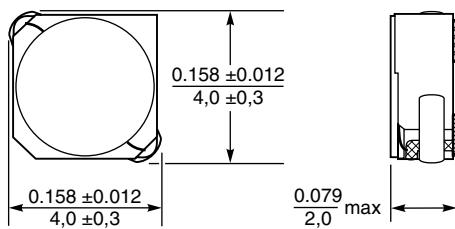
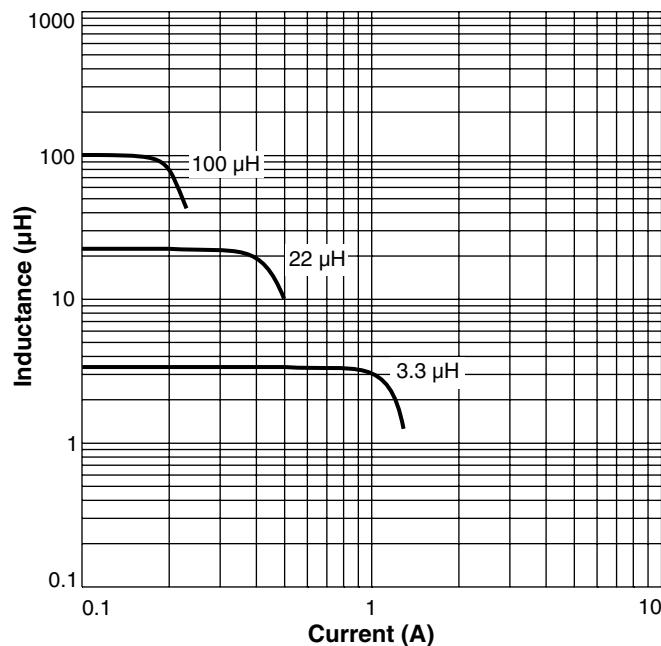
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Typical L vs Frequency



Typical L vs Current



Recommended Land Pattern

Terminations: Copper/tin over phos bronze
Tape and reel: 2000/13" reel 8 mm tape width:
 For packaging data see Tape and Reel Specifications section.

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 Please check our website for latest information. Document 329-2 Revised 12/28/04

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