

**NEW!**

# SMT Power Inductors - MLC Series



The MLC series of flat wire power inductors offers extremely low DC resistance and very high saturation current ratings (up to 37 Amps). Its compact size and magnetic shielding make it suitable for use in high-density boards.

These inductors are ideal for power supply applications where high current handling is essential. They are perfect for use in VRD/VRM controllers.

Inductance is unaffected by ambient temperature up to +135°C. The materials used in the unique design eliminate all thermal aging issues. Custom inductance values are also possible.

Coilcraft **Designer's Kit C187** 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> ±20% (µH)	DCR ±5% (mOhm)	SRF (MHz)	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Height max (mm)
<b>10.5 mm × 12.0 mm body size</b>						
MLC1265-361MX_	0.36	0.930	234	37.0	19.0	6.5
MLC1260-401MX_	0.40	0.930	228	35.5	19.8	6.1
MLC1255-421MX_	0.42	0.930	219	33.0	19.8	5.6
MLC1240-451MX_	0.45	1.73	198	25.0	15.7	4.1
MLC1265-701MX_	0.70	1.24	134	26.0	17.3	6.5
MLC1250-801MX_	0.80	2.35	151	24.5	14.8	5.1
MLC1240-901MX_	0.90	2.57	108	21.0	13.4	4.1
MLC1260-122MX_	1.20	2.38	93	21.0	14.7	6.1
MLC1255-122MX_	1.20	2.38	85	20.0	14.3	5.6
MLC1250-132MX_	1.30	2.38	76	20.0	10.9	5.1
MLC1245-152MX_	1.50	4.08	79	15.0	11.5	4.6
MLC1260-172MX_	1.70	2.84	72	17.0	13.6	6.1
MLC1245-402MX_	4.00	8.18	46	13.0	8.8	4.6
<b>13.2 mm × 15.0 mm body size</b>						
MLC1565-501MX_	0.50	0.864	169	36.5	19.7	6.5
MLC1555-551MX_	0.55	1.34	165	32.0	18.2	5.6
MLC1560-901MX_	0.90	1.72	101	27.0	13.0	6.0
MLC1538-102MX_	1.00	3.46	81	24.5	12.4	3.9
MLC1550-102MX_	1.00	1.72	76	23.0	13.7	5.2
MLC1538-152MX_	1.50	4.36	50	21.0	10.6	3.9
MLC1550-252MX_	2.50	3.43	45	16.5	11.4	5.2
MLC1555-302MX_	3.00	4.06	42	14.0	12.2	5.6
MLC1550-452MX_	4.50	7.13	36	11.5	9.5	5.2

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

↓  
**MLC1550-452MX C**

**Packaging: C** = 7" machine-ready reel. EIA-481 embossed plastic tape.

**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.

2. Inductance measured at 500 kHz, 0.1 Vrms, 0 Adc using a Coilcraft SMD-A fixture in an Agilent/HP 4284A LCR meter.

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

4. Average current for a 40°C (max) rise above 25°C ambient.

5. Operating temperature range -40°C to +135°C.

6. Electrical specifications at 25°C.

## Coilcraft®

Specifications subject to change without notice.

Please check our website for latest information. Document 327-1 Revised 11/11/05

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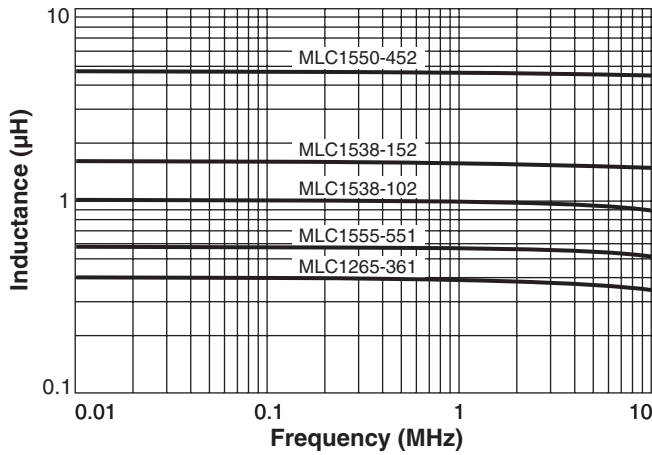
E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>



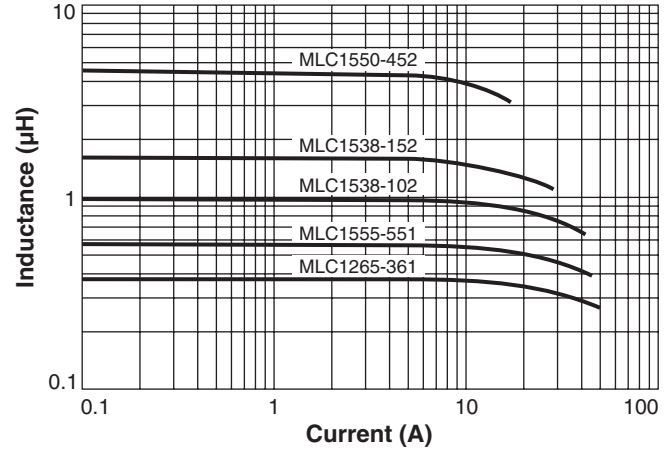
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# SMT Power Inductors - MLC Series

## Typical L vs Frequency

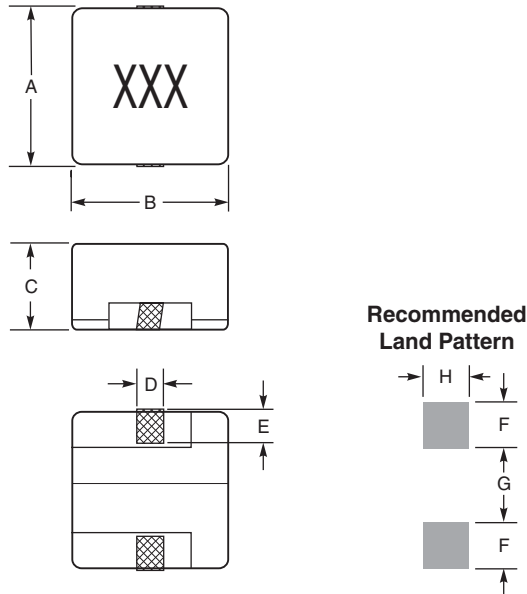


## Typical L vs Current



Inductance vs current is unaffected by ambient temperature up to 135°C.

## Dimensions

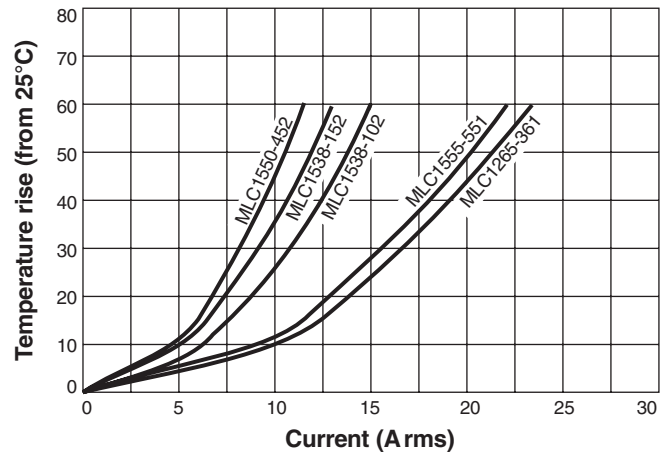


Terminations: Tin/silver over copper

Body Size	A max	B max	C max	D	E	F	G	H
1240	12.0	10.5	4.1	1.8	2.3	4.0	4.0	3.5
1245	12.0	10.5	4.6	1.8	2.3	4.0	4.0	3.5
1250	12.0	10.5	5.1	1.8	2.3	4.0	4.0	3.5
1255	12.0	10.5	5.6	1.8	2.3	4.0	4.0	3.5
1260	12.0	10.5	6.1	1.8	2.3	4.0	4.0	3.5
1265	12.0	10.5	6.5	1.8	2.3	4.0	4.0	3.5
1538	15.0	13.2	3.9	2.4	3.3	5.0	5.4	4.1
1550	15.0	13.2	5.2	2.4	3.3	5.0	5.4	4.1
1555	15.0	13.2	5.6	2.4	3.3	5.0	5.4	4.1
1560	15.0	13.2	6.0	2.4	3.3	5.0	5.4	4.1
1565	15.0	13.2	6.5	2.4	3.3	5.0	5.4	4.1

All dimensions are in mm.

## Temperature Rise vs Current



## Tape and Reel

<b>MLC1240</b>	250/7" reel; 900/13" reel	24 mm tape width
<b>MLC1245</b>	200/7" reel; 800/13" reel	24 mm tape width
<b>MLC1250</b>	200/7" reel; 700/13" reel	24 mm tape width
<b>MLC1255</b>	200/7" reel; 700/13" reel	24 mm tape width
<b>MLC1260</b>	175/7" reel; 600/13" reel	24 mm tape width
<b>MLC1265</b>	150/7" reel; 600/13" reel	24 mm tape width
<b>MLC1538</b>	200/7" reel; 800/13" reel	24 mm tape width
<b>MLC1550</b>	150/7" reel; 600/13" reel	24 mm tape width
<b>MLC1555</b>	150/7" reel; 500/13" reel	24 mm tape width
<b>MLC1560</b>	150/7" reel; 500/13" reel	24 mm tape width
<b>MLC1565</b>	125/7" reel; 500/13" reel	24 mm tape width

For packaging data see Tape and Reel Specifications section.



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Please check our website for latest information. Document 327-2 Revised 01/27/05

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