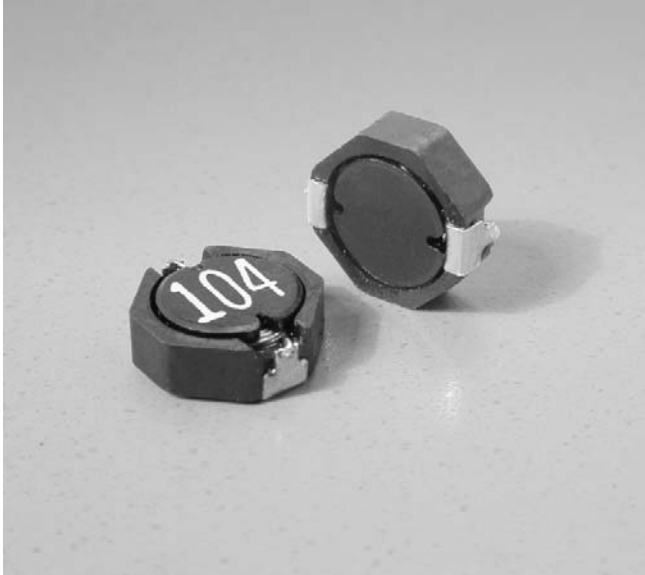


# SMT Power Inductor - MOS6020 Series



Measuring a mere 2 mm high, the MOS6020 family of surface mount power inductors offers exceptionally low DC resistance and excellent current handling.

These magnetically shielded inductors are extremely space-efficient, with a 6 × 7.1 mm footprint. They are available in inductance values from 2.2  $\mu\text{H}$  to 470  $\mu\text{H}$  with saturation current ratings up to 2.15 Amps. Custom versions up to 4.7 mH are also available.

Coilcraft **Designer's Kit C159** contains samples of all values shown. To order, contact Coilcraft or purchase on-line at <http://order.coilcraft.com>.

Part number <sup>1</sup>	L $\pm 20\%$ <sup>2</sup> ( $\mu\text{H}$ )	DCR max (Ohms)	SRF typ <sup>3</sup> (MHz)	Isat <sup>4</sup> (A)	Irms <sup>5</sup> (A)
MOS6020-222MX_	2.2	0.035	110	2.15	4.1
MOS6020-332MX_	3.3	0.046	85	1.80	3.6
MOS6020-472MX_	4.7	0.050	60	1.50	3.1
MOS6020-682MX_	6.8	0.078	55	1.28	2.7
MOS6020-103MX_	10	0.092	36	1.00	2.2
MOS6020-153MX_	15	0.130	30	0.85	1.8
MOS6020-223MX_	22	0.182	22	0.72	1.4
MOS6020-333MX_	33	0.290	20	0.58	1.1
MOS6020-473MX_	47	0.420	16	0.49	0.7
MOS6020-683MX_	68	0.520	15	0.40	0.63
MOS6020-104MX_	100	0.800	13	0.33	0.56
MOS6020-154MX_	150	1.28	10	0.27	0.49
MOS6020-224MX_	220	2.00	8	0.22	0.42
MOS6020-334MX_	330	2.84	7	0.18	0.35
MOS6020-474MX_	470	4.40	5	0.15	0.29

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

↓  
**MOS6020-104MX C**

**Packaging: C** = 7" machine-ready reel. EIA-481 embossed plastic tape (500 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 (2000 parts per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4284A or equivalent.

3. SRF measured using Agilent/HP 8753D network analyzer.

4. DC current at which the inductance drops 30% (typ) from its value without current.

5. Average current for 40°C temperature rise from 25°C ambient.

6. Operating temperature range -40°C to +85°C.

7. Electrical specifications at 25°C.

See Qualification Standards section for environmental and test data.

**Coilcraft**<sup>®</sup>

Specifications subject to change without notice.

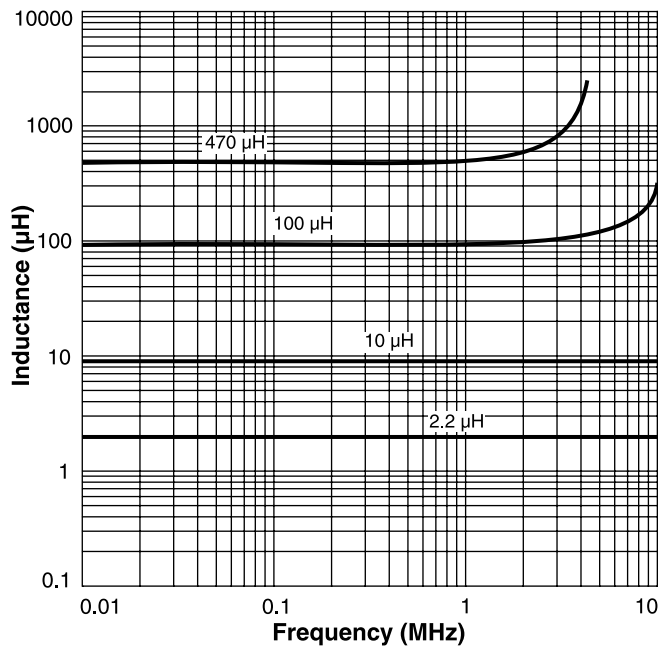
Please check our website for latest information. Document 287-1 Revised 07/30/04

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

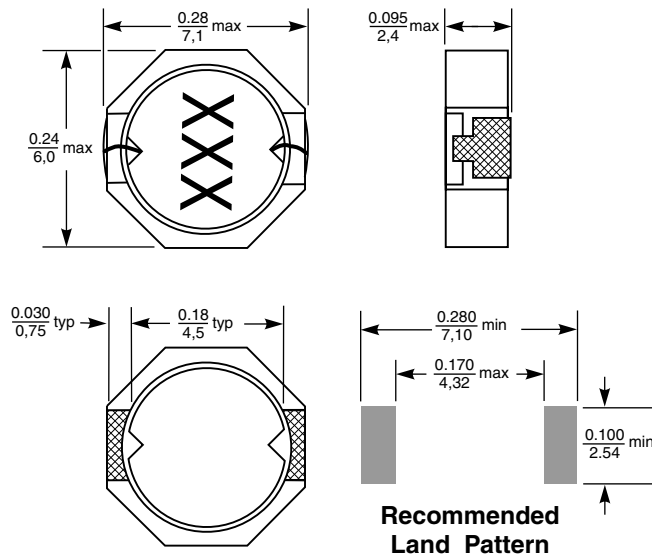
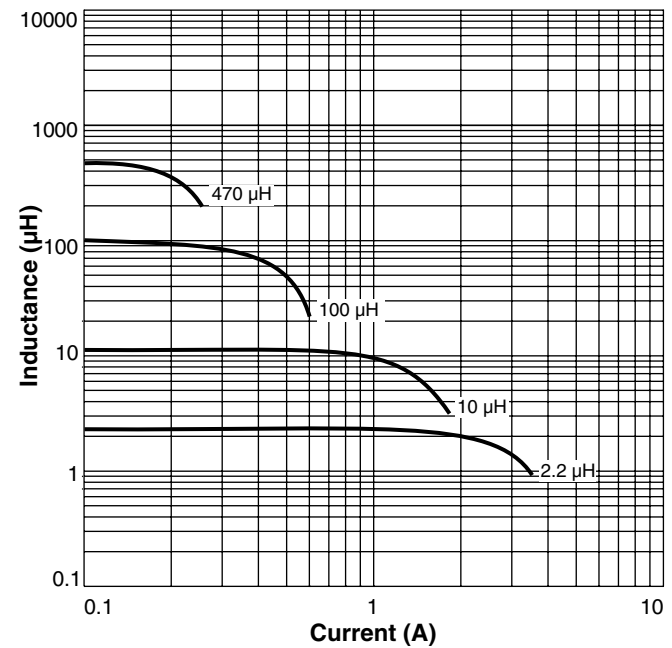
E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>

# SMT Power Inductors - MOS6020 Series

## Typical L vs Frequency



## Typical L vs Current



**Terminations:** Copper/tin over phos bronze  
**Tape and reel:** 500/7" reel; 2000/13" reel 16 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. Document 287-2 Revised 12/27/04

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