

**NEW!**

# SMT Power Inductors - DO2010 Series



The DO2010 is only 2 mm square and 1 mm high. They require less than half the board space of our next smaller power inductor, the LPO3010.

Despite their miniature size, these parts can handle current up to 2.4 Amps, making them ideal for use in PDAs, wireless phones, digital cameras and other handheld products. Their cost-effective design makes them very attractive for high-volume applications.

They are available in 19 inductance values from 0.5  $\mu\text{H}$  to 100  $\mu\text{H}$ , all at 20% tolerance.

Coilcraft **Designer's Kit C399** contains samples of all the standard parts shown. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

Part number <sup>1</sup>	Inductance $\pm 20\%^2$ ( $\mu\text{H}$ )	DCR max <sup>3</sup> (Ohms)	SRF typ <sup>4</sup> (MHz)	Isat <sup>5</sup> (A)	Irms <sup>6</sup> (A)
DO2010-501ML_	0.50	0.100	250	2.40	1.50
DO2010-681ML_	0.68	0.120	200	2.10	1.50
DO2010-801ML_	0.80	0.150	185	1.80	1.40
DO2010-102ML_	1.0	0.200	162	1.80	1.20
DO2010-152ML_	1.5	0.270	127	1.45	0.97
DO2010-202ML_	2.0	0.315	110	1.25	0.90
DO2010-222ML_	2.2	0.400	104	1.20	0.84
DO2010-332ML_	3.3	0.550	85	0.98	0.73
DO2010-472ML_	4.7	0.800	65	0.80	0.60
DO2010-682ML_	6.8	1.00	55	0.73	0.54
DO2010-822ML_	8.2	1.08	50	0.65	0.49
DO2010-103ML_	10.0	1.45	43	0.61	0.44
DO2010-123ML_	12.0	1.84	35	0.51	0.39
DO2010-153ML_	15.0	2.14	30	0.47	0.36
DO2010-223ML_	22.0	2.80	25	0.42	0.32
DO2010-333ML_	33.0	4.10	20	0.34	0.25
DO2010-473ML_	47.0	6.00	16	0.28	0.21
DO2010-683ML_	68.0	8.80	13	0.23	0.16
DO2010-104ML_	100.0	15.7	11	0.18	0.13

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

**DO2010-123ML C**

**Packaging: C** = 7" machine-ready reel. EIA-481 embossed plastic tape (1000 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. Factory order only, not stocked (3500 parts per full reel).

- Inductance tested at 100 kHz, 0.1 Vrms.
- DCR measured on a micro-ohmmeter.
- SRF measured using Agilent/HP 4191A or equivalent.
- DC current at which the inductance drops 10% (typ) from its value without current.
- Average current for a 40°C rise from 25°C ambient.
- Storage and operating temperature range -40°C to +85°C.
- Electrical specifications at 25°C.

## Coilcraft®

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

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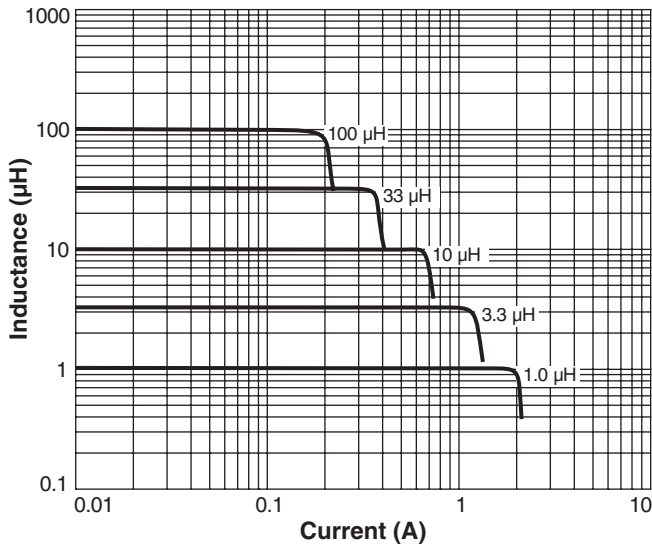
E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>



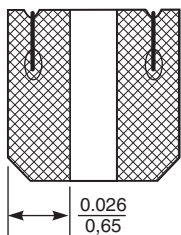
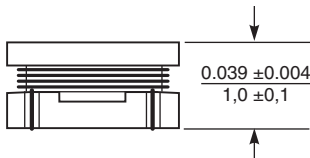
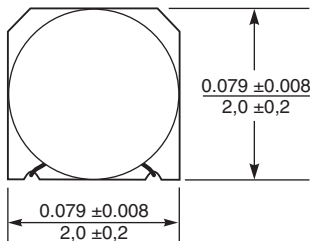
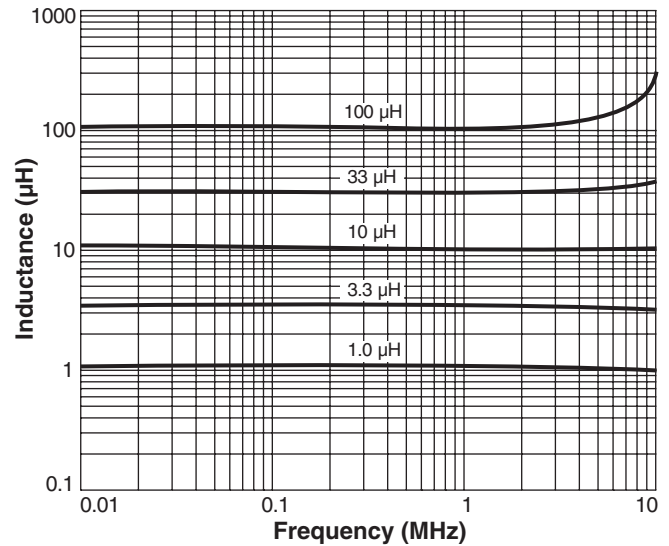
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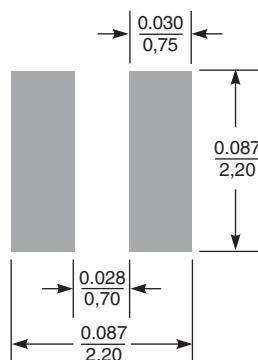
Typical L vs Current



Typical L vs Frequency



**Recommended Land Pattern**



**Weight:** 11 mg  
**Terminations:** Tin over nickel over silver-platinum-glass frit  
**Tape and reel:** 1000/7" reel; 3500/13" reel 12 mm tape width  
 For packaging data see Tape and Reel Specifications section.



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