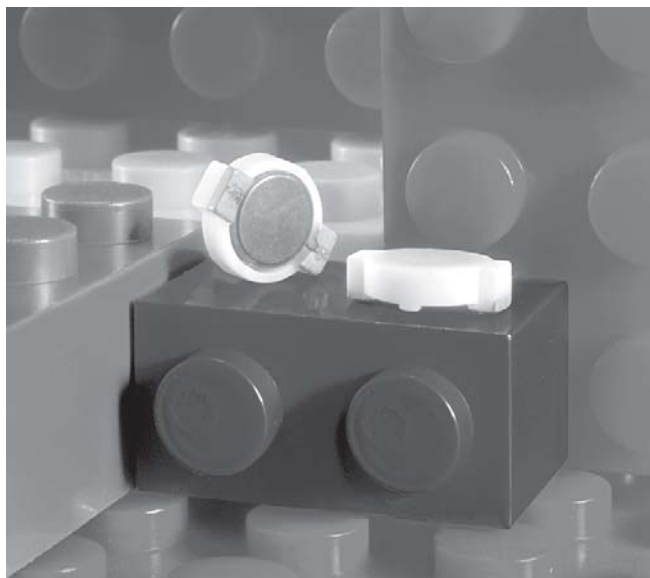




# SMT Power Inductors - DO1606 Series



This series is designed for applications requiring high inductance, high current and an ultra-low profile.

The DO1606 measures only 2 mm high and has a footprint of just 5,3 x 6,5 mm. But despite this small size, it is available in versions that will handle up to 2.5 Amps. The series covers a wide range of inductance values from 1  $\mu$ H to 1 mH.

The core is completely enclosed in a rugged ceramic case giving it a flat top that provides the optimum surface for reliable pick and place operations.

Samples of all standard values are available in Coilcraft **Designer's Kit C338**. To order, please contact Coilcraft or purchase the kit on-line at <http://order.coilcraft.com>.



**SPICE models**  
ON OUR WEB SITE OR CD

DataSheet

Part number <sup>1</sup>	L $\pm$ 20% <sup>2</sup> ( $\mu$ H)	DCR max (Ohms)	SRF ref (MHz)	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)
DO1606T-102ML_	1.0	0.04	230	2.5	2.3
DO1606T-152ML_	1.5	0.06	180	2.2	2.1
DO1606T-222ML_	2.2	0.07	140	1.8	1.7
DO1606T-332ML_	3.3	0.12	110	1.4	1.3
DO1606T-472ML_	4.7	0.15	100	1.2	1.1
DO1606T-682ML_	6.8	0.20	80	1.1	1.0
DO1606T-822ML_	8.2	0.23	70	1.0	0.95
DO1606T-103ML_	10	0.30	60	1.0	0.90
DO1606T-153ML_	15	0.40	45	0.8	0.70
DO1606T-223ML_	22	0.54	35	0.6	0.50
DO1606T-333ML_	33	0.74	30	0.5	0.45
DO1606T-473ML_	47	1.1	22	0.45	0.40
DO1606T-683ML_	68	1.6	20	0.35	0.35
DO1606T-104ML_	100	2.3	15	0.30	0.30
DO1606T-154ML_	150	3.5	10	0.25	0.25
DO1606T-224ML_	220	5.7	9	0.20	0.18
DO1606T-334ML_	330	8.2	8	0.16	0.16
DO1606T-474ML_	470	10.8	7	0.14	0.12
DO1606T-684ML_	680	17.2	5	0.12	0.10
DO1606T-105ML_	1000	22.6	4	0.08	0.08

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

#### DO1606T-105ML C

**Packaging:** **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (750 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 (2500 parts per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Vdc.

3. DC current at which the inductance drops 10% (typ) from its value without current.

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

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

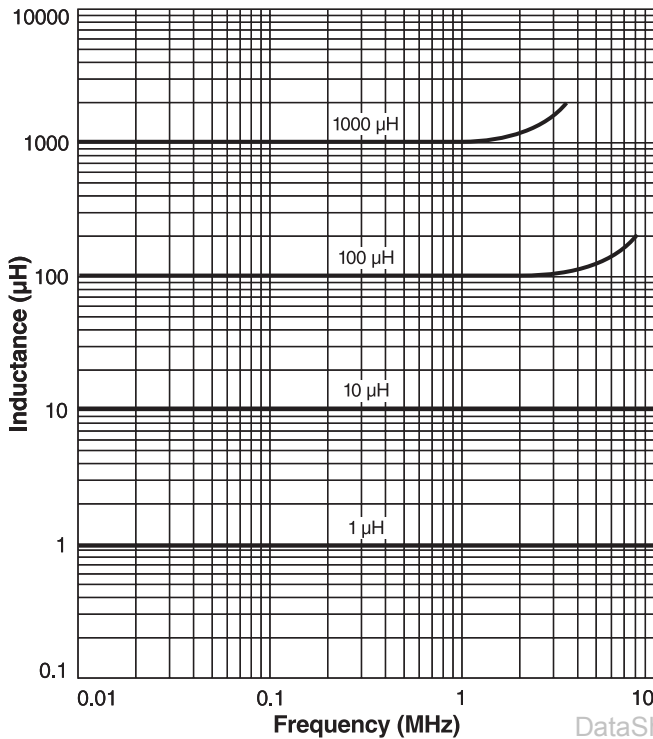
6. Electrical specifications at 25°C.

See Qualification Standards section for environmental and test data.

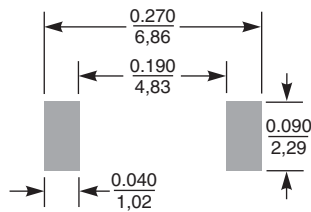
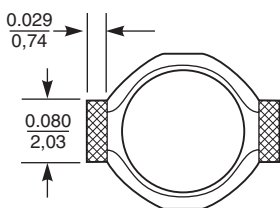
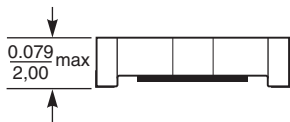
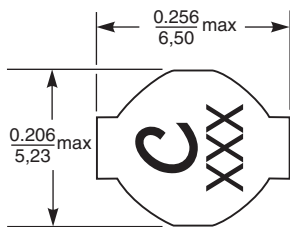
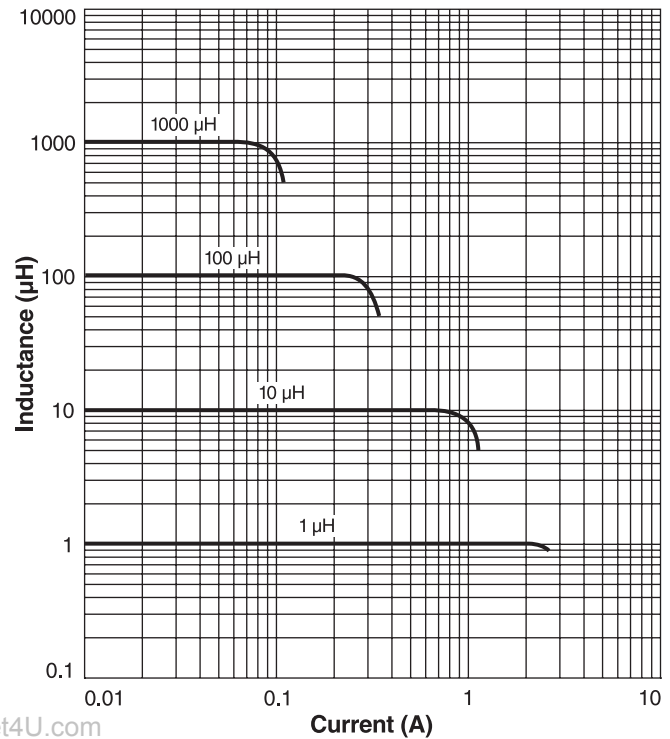


# SMT Power Inductors - DO1606 Series

## Typical L vs Frequency



## Typical L vs Current



**Recommended Land Pattern**

**Weight:** 116 – 136 mg  
**Terminations:** Silver-palladium-platinum  
**Tape and reel:** 750/7" reel; 2500/13" reel 12 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 213-2 Revised 01/24/05

[www.DataSheet4U.com](http://www.DataSheet4U.com)

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>