



# SMT Power Inductors – DO1608 Series



The DO1608 Series has a footprint of only 0.26" × 0.175" (6,6 mm × 4,5 mm). Their high energy storage and very low resistance make them the ideal inductors for DC-DC conversion in notebook computers, PDAs, step-up or step-down converters, flash memory programmers, etc.

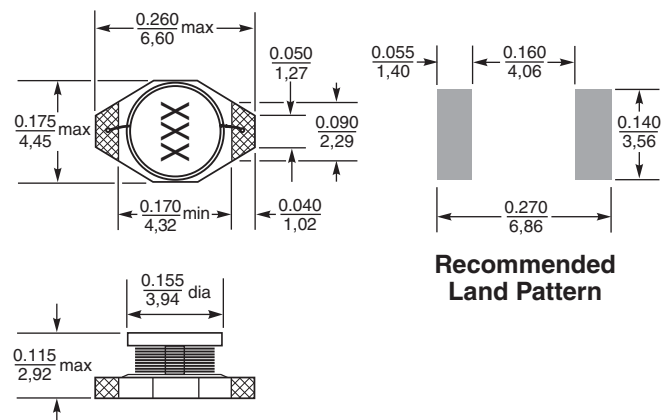
For reliable surface mounting, we've designed the DO Series with a flat top and robust temperature deflection to prevent damage during solder reflow.

In addition to the standard versions shown here, custom inductors are available to meet your exact requirements. Coilcraft **Designer's Kit C177** contains three samples each of the parts shown. To order, please contact Coilcraft or visit <http://order.coilcraft.com>.

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

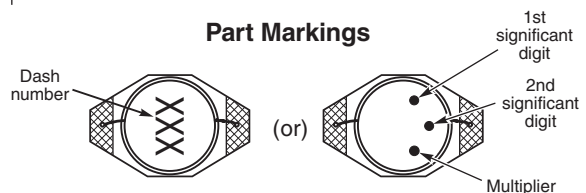
Part number <sup>1</sup>	L ±20% <sup>2</sup> (µH)	DCR max (Ohms)	SRF typ (MHz)	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)
DO1608C-102	1.0	0.05	130	2.9	2.9
DO1608C-152	1.5	0.06	115	2.6	2.8
DO1608C-222	2.2	0.07	90	2.3	2.4
DO1608C-332	3.3	0.08	70	2.0	2.0
DO1608C-472	4.7	0.09	50	1.5	1.5
DO1608C-682	6.8	0.13	45	1.2	1.4
DO1608C-103	10	0.16	35	1.1	1.1
DO1608C-153	15	0.23	30	0.90	1.2
DO1608C-223	22	0.37	20	0.70	0.8
DO1608C-333	33	0.51	15	0.58	0.6
DO1608C-473	47	0.64	14	0.50	0.5
DO1608C-683	68	0.86	11	0.40	0.4
DO1608C-104	100	1.27	9	0.31	0.3
DO1608C-154	150	2.00	6	0.27	0.25
DO1608C-224	220	3.11	5.5	0.22	0.20
DO1608C-334	330	3.80	5	0.18	0.16
DO1608C-474	470	5.06	4	0.16	0.15
DO1608C-684	680	9.20	3	0.14	0.12
DO1608C-105	1000	13.8	2	0.10	0.07

- Part number on reel label will have a suffix to indicate packaging:  
C = machine ready 7" reel, B = partial reel, D = machine-ready 13" reel.
  - Tested at 100 kHz, 0.1 Vrms, 0 Adc.
  - DC current at which the inductance drops 10% (typ) from its value without current.
  - Average current for 15°C temperature rise from 25°C.
  - Operating temperature range -40°C to +85°C.
  - Electrical specifications at 25°C.
- See Qualification Standards section for environmental and test data.  
See Color Coding section for part marking data.



**Recommended Land Pattern**

## Part Markings



**Weight:** 128 – 164 mg  
**Terminations:** Nickel/gold over moly-manganese  
**Tape and reel:** 750/7" reel; 2500/13" reel 12 mm tape width  
 For packaging data see Tape and Reel Specifications section.

**Coilcraft**®

Specifications subject to change without notice.

Please check our website for latest information. Document 177-1 Revised 12/10/04

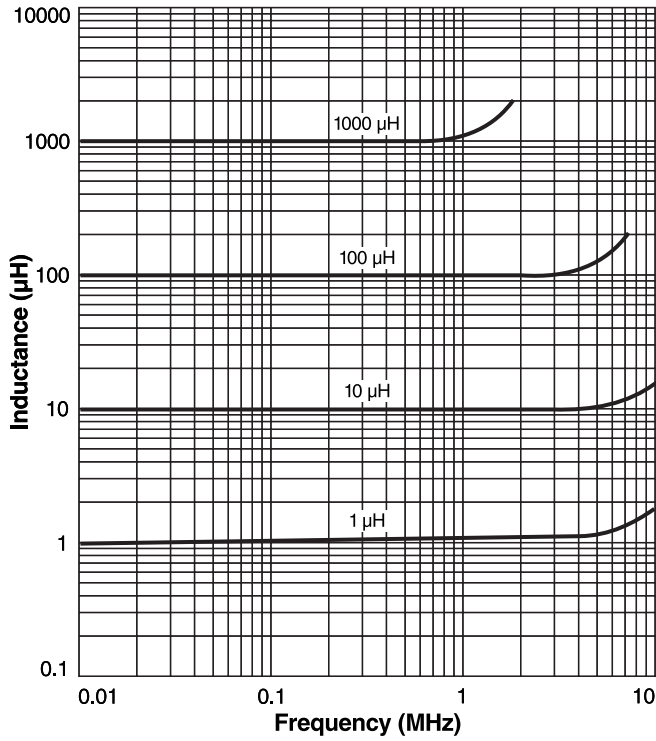
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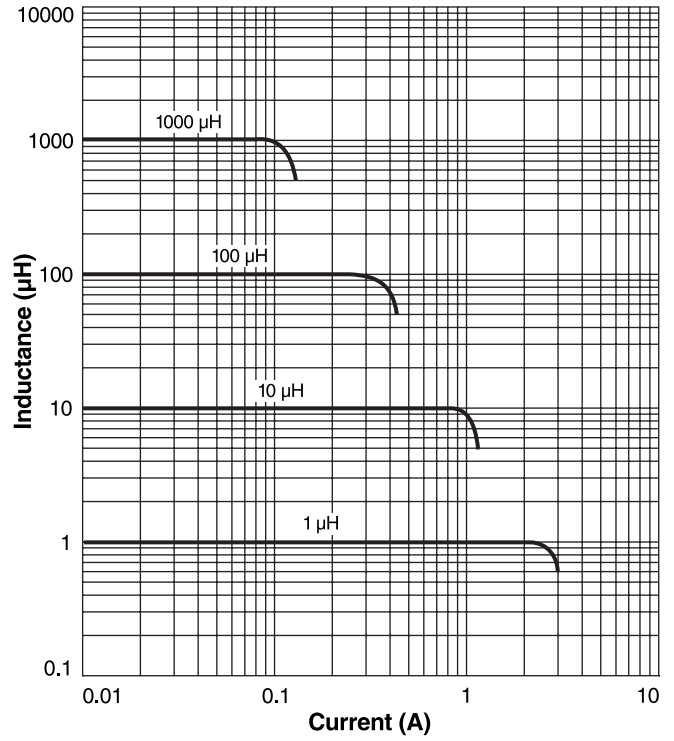


# SMT Power Inductors – DO1608 Series

## Typical L vs Frequency



## Typical L vs Current



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 Please check our website for latest information. Document 177-2 Revised 10/31/03

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