

# SMT Power Inductors – DO3316 Series

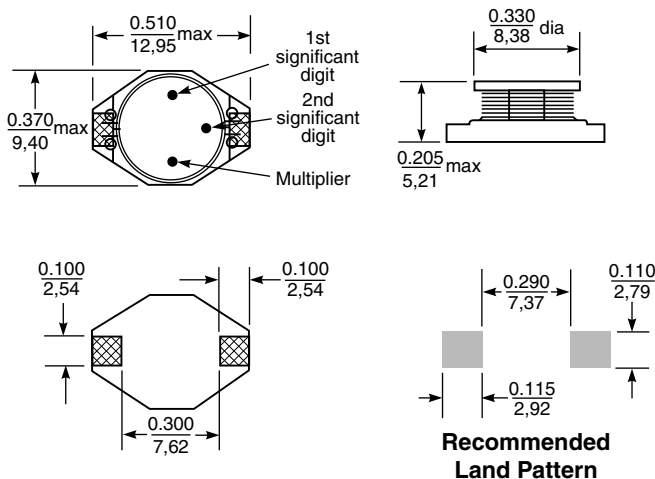


The DO3316 Series of surface mount inductors is designed for the smallest possible size, lowest cost and highest performance. Their high energy storage and very low resistance make them the ideal inductors for DC-DC conversion in notebook computers, PDAs, step-up or step-down converters, flash memory 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 C105** contains three samples each of the standard parts shown as well as all standard values from the DO1608 Series. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

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



Parts/reel: 13" 1,000 Tape width: 24 mm  
For packaging data see Tape and Reel Specifications section.

Part number	L $\pm 20\%$ <sup>1</sup> ( $\mu$ H)	DCR max (Ohms)	SRF typ <sup>2</sup> (MHz)	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)
DO3316P-102	1.0	0.009	100	9.0	6.8
DO3316P-152	1.5	0.010	90	8.0	6.4
DO3316P-222	2.2	0.012	80	7.0	6.1
DO3316P-332	3.3	0.015	65	6.4	5.4
DO3316P-472	4.7	0.018	45	5.4	4.8
DO3316P-682	6.8	0.027	38	4.6	4.4
DO3316P-103	10	0.038	30	3.8	3.9
DO3316P-153	15	0.046	27	3.0	3.1
DO3316P-223	22	0.085	19	2.6	2.7
DO3316P-333	33	0.10	15	2.0	2.1
DO3316P-473	47	0.14	12	1.6	1.8
DO3316P-683	68	0.20	10	1.4	1.5
DO3316P-104	100	0.28	9	1.2	1.3
DO3316P-154	150	0.40	6	1.0	1.0
DO3316P-224	220	0.61	5	0.8	0.8
DO3316P-334	330	1.02	4.5	0.6	0.6
DO3316P-474	470	1.27	3.5	0.5	0.5
DO3316P-684	680	2.02	2.5	0.4	0.4
DO3316P-105	1000	3.00	2.0	0.3	0.3

1. Tested at 100 kHz, 0.1 Vrms, 0 Adc.
  2. SRF >13 MHz measured using Agilent/HP 8753D network analyzer; <13 MHz using Agilent/HP 4192A.
  3. DC current at which inductance drops 10% (typ) from its value without current.
  4. Average current for 40°C temperature rise from 25°C.
  5. Operating temperature range -40°C to +85°C.
  6. Electrical specifications at 25°C.
- See Qualification Standards section for environmental and test data.

**Coilcraft**<sup>®</sup>

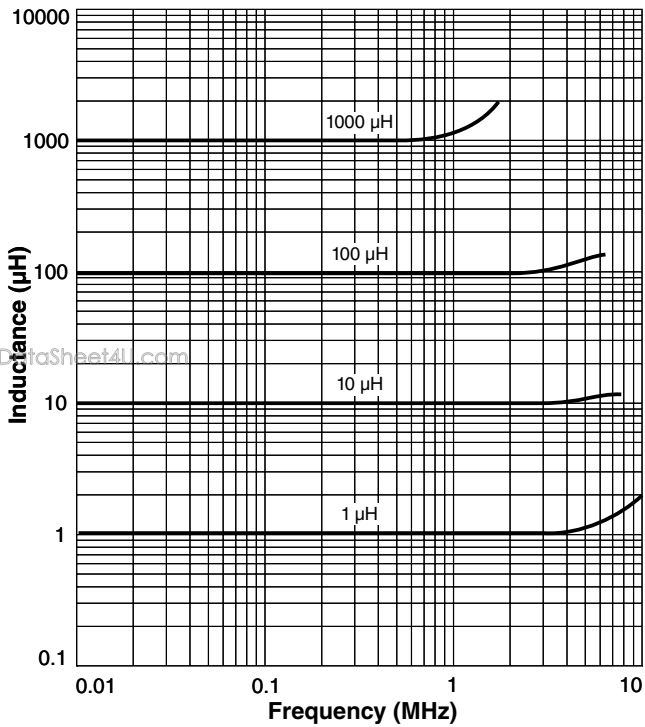
Specifications subject to change without notice. Document 179-1 Revised 11/20/02

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

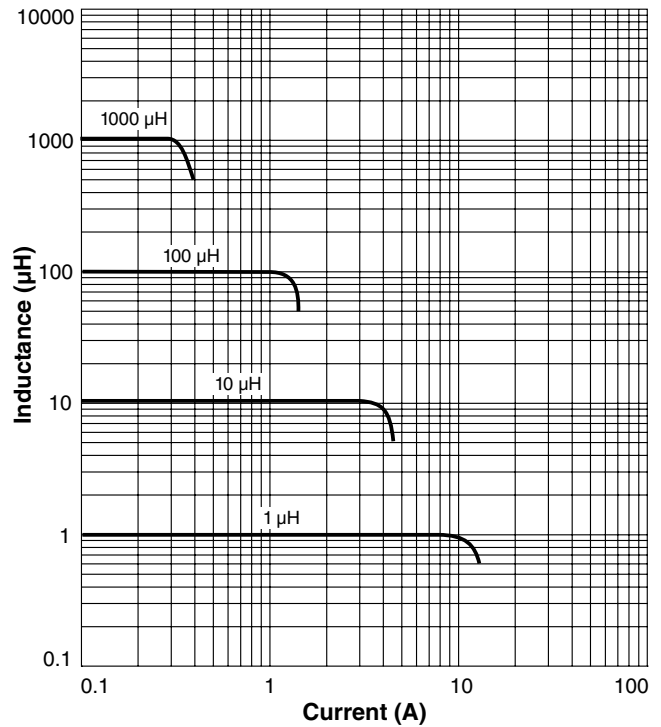
E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>

# SMT Power Inductors—DO3316 Series

## Typical L vs Frequency



## Typical L vs Current



Specifications subject to change without notice. Document 179-2 Revised 4/9/01

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

E-mail info@coilcraft.com Web http://www.coilcraft.com