

# SMT Power Inductors—DO3316 Series

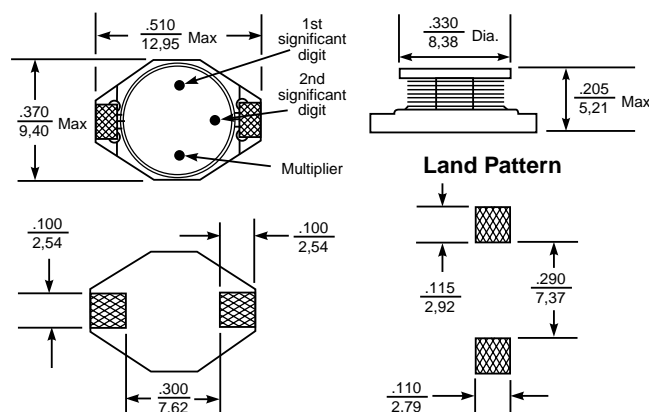


The DO3316 Series of surface mount inductors is designed for the smallest possible size, lowest cost and highest performance. Their high energy storage and very low resistance make them the ideal inductors for DC-DC conversion in notebook computers, PDAs, step-up or step-down converters, flash memory 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 3 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>.

**PSpice models** SEE CATALOG, WEB SITE OR CD



Parts/reel: 13" 1,000 Tape width: 24 mm

For packaging data, see "Tape and Reel Specifications" (Document 173).

Part Number	L $\pm 20\%$ <sup>1</sup> ( $\mu$ H)	DCR max. ( $\Omega$ )	SRF typ <sup>2</sup> (MHz)	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A rms)
DO3316P-102	1.0	.009	100	9.0	6.8
DO3316P-152	1.5	.010	90	8.0	6.4
DO3316P-222	2.2	.012	80	7.0	6.1
DO3316P-332	3.3	.015	65	6.4	5.4
DO3316P-472	4.7	.018	45	5.4	4.8
DO3316P-682	6.8	.027	38	4.6	4.4
DO3316P-103	10	.038	30	3.8	3.9
DO3316P-153	15	.046	27	3.0	3.1
DO3316P-223	22	.085	19	2.6	2.7
DO3316P-333	33	.10	15	2.0	2.1
DO3316P-473	47	.14	12	1.6	1.8
DO3316P-683	68	.20	10	1.4	1.5
DO3316P-104	100	.28	9	1.2	1.3
DO3316P-154	150	.40	6	1.0	1.0
DO3316P-224	220	.61	5	.8	.8
DO3316P-334	330	1.02	4.5	.6	.6
DO3316P-474	470	1.27	3.5	.5	.5
DO3316P-684	680	2.02	2.5	.4	.4
DO3316P-105	1000	3.00	2.0	.3	.3

For environmental data, see "Product Specifications" (Document 164).

1. Tested at 100 kHz, 0.1 Vrms.
2. SRF >13 MHz measured using Agilent/HP8753D network analyzer; <13 MHz using Agilent/HP4192A.
3. Inductance drop = 10% typ. at rated Isat.
4.  $\Delta T = 40^\circ\text{C}$  rise typ. at Irms.
5. Operating temperature range  $-40^\circ\text{C}$  to  $+85^\circ\text{C}$ .
6. Electrical specifications at  $25^\circ\text{C}$ .

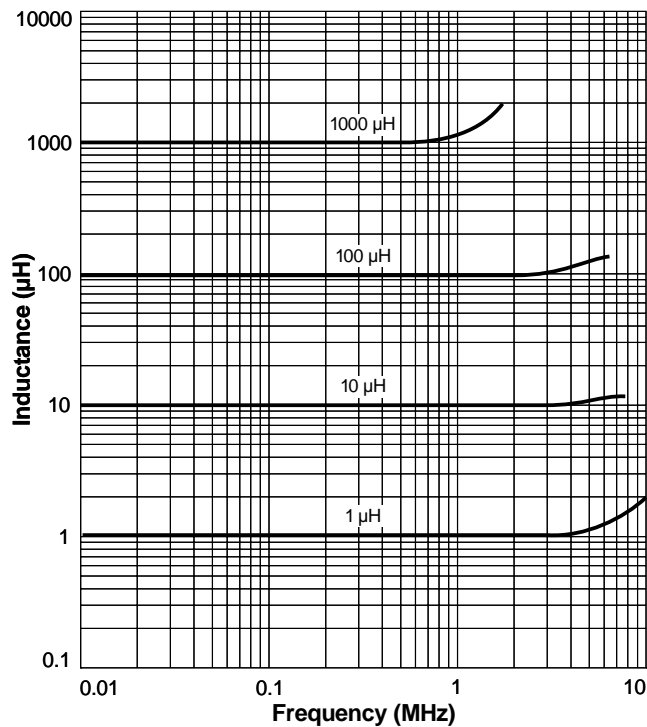
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Specifications subject to change without notice. Document 179-1 Revised 4/9/01

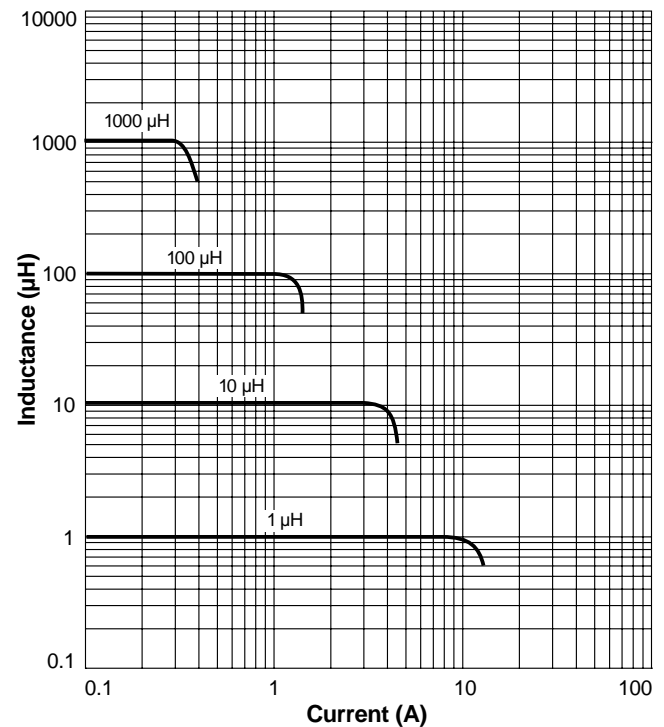
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# SMT Power Inductors—DO3316 Series

## Typical L vs Frequency



## Typical L vs Current



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