

# SMT Power Inductors – DT3316 Series



These magnetically shielded inductors are designed for a wide variety of applications, including board mounted DC-DC converters, miniature power supplies and voltage multiplying circuits. They function equally well in filter and smoothing circuit applications.

The Coilcraft DT Series represents the ultimate in cost-effective miniature power inductors. They are constructed of materials specially developed for surface mount applications to ensure the best possible reliability and ease of use and handling.

For free evaluation samples or to order, contact Coilcraft or visit [www.coilcraft.com](http://www.coilcraft.com).

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

Specifications				Operating Parameters			
Part number	Inductance $\pm 20\%$ <sup>1</sup> ( $\mu\text{H}$ )	DCR max (Ohms)	SRF typ (MHz)	Inductance rating <sup>2</sup> ( $\mu\text{H}$ )	Current rating <sup>3</sup> (A)	Energy storage max ( $\mu\text{Joules}$ )	Switching frequency max
DT3316P-102	1.0	0.025	60	0.50	5.0	9	1 MHz
DT3316P-152	1.5	0.030	55	0.70	5.0	12	1 MHz
DT3316P-222	2.2	0.035	55	1.0	5.0	15	1 MHz
DT3316P-332	3.3	0.040	50	1.5	5.0	16	1 MHz
DT3316P-472	4.7	0.045	45	2.0	3.0	10	1 MHz
DT3316P-682	6.8	0.050	40	4.0	2.5	14	1 MHz
DT3316P-103	10	0.055	35	5.0	2.0	11	1 MHz
DT3316P-153	15	0.060	25	6.0	1.8	12	1 MHz
DT3316P-223	22	0.084	22	10	1.5	11	1 MHz
DT3316P-333	33	0.090	18	12	1.3	13	1 MHz
DT3316P-473	47	0.11	16	27	1.0	13	1 MHz
DT3316P-683	68	0.15	12	40	0.90	17	1 MHz
DT3316P-104	100	0.29	9	50	0.80	15	1 MHz
DT3316P-154	150	0.36	8	80	0.60	15	500 kHz
DT3316P-224	220	0.39	6	90	0.50	10	500 kHz
DT3316P-334	330	0.73	5	150	0.40	13	500 kHz
DT3316P-474	470	0.88	4	200	0.35	13	500 kHz
DT3316P-684	680	1.15	3	300	0.30	13	500 kHz
DT3316P-105	1000	1.45	2.5	420	0.25	13	500 kHz

1. Inductance tested at 0.1 Vrms, 100 kHz, 0 Adc.

2. Measured at the rated current. Refer to L vs Current curves for more detail.

3. Average maximum allowable current. DT Series inductors are designed for current spikes as high as 2 x the current rating.

4. Operating temperature range  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ .

5. Electrical specifications at  $25^{\circ}\text{C}$ .

See Qualification Standards section for environmental and test data.

See Color Coding section for part marking information.

**Coilcraft**<sup>®</sup>

Specifications subject to change without notice. Document 180-1 Revised 05/06/03

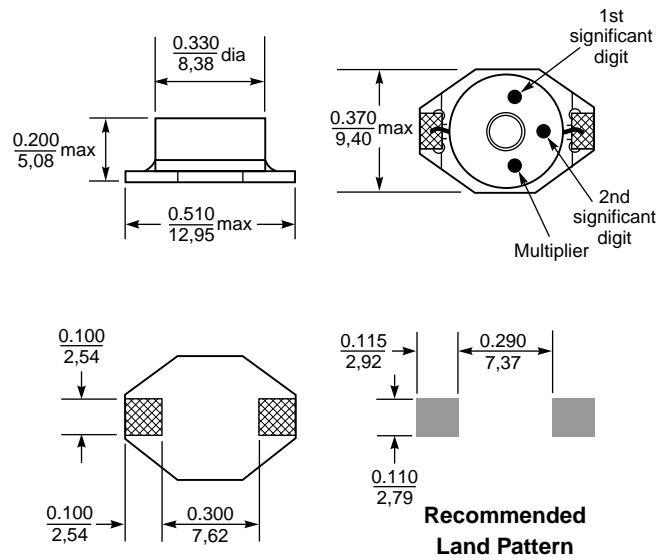
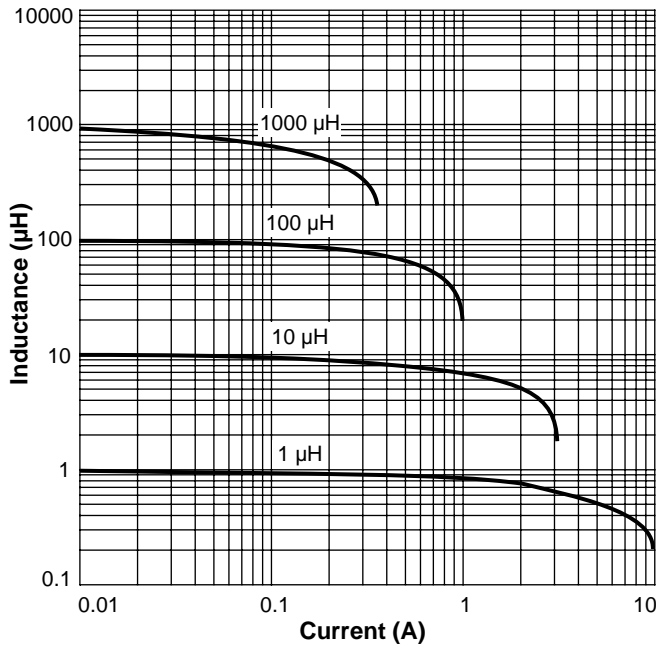
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## Typical L vs Current



Parts/reel: 13" 1000 Tape width: 24 mm  
 For packaging data see Tape and Reel Specifications section.



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