



SMT Power Inductors - DS3316 Series



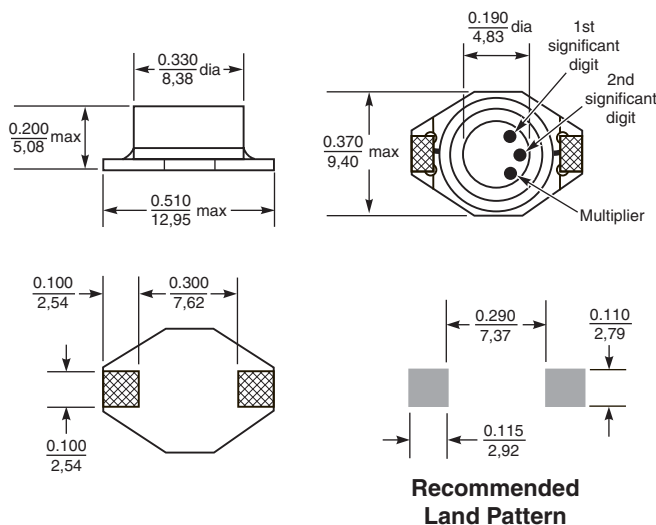
A small footprint, magnetic shielding and high efficiency are features of the DS3316 family of power inductors. They're ideal for high performance DC-DC converter applications, especially those requiring shielding.

Like all Coilcraft surface mount power inductors, these parts are designed with a flat top for reliable pick and place operations. The terminations wrap around the end of the base, ensuring a sound solder fillet and simplifying inspection.

Saturation current ratings up to 5.6 A and rms current ratings as high as 5 A are available. DC resistance as low as 0.021 Ohms keeps power losses to a minimum.

In addition to the standard parts shown here, DS3316 inductors in custom values are also available. Coilcraft **Designer's Kit C116** contains samples of each of the standard parts shown. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

SPICE models ON OUR WEB SITE OR CD



Weight: 0.82 – 0.87 g
Terminations: Nickel/gold over phos bronze
Tape and reel: 1000/13" reel 24 mm tape width
 For packaging data see Tape and Reel Specifications section.

Part Number ¹	L ±20% ² (μH)	DCR max (Ohms)	SRF typ (MHz)	Isat ³ (A)	Irms ⁴ (A)
DS3316P-102	1.0	0.021	140	5.6	5.0
DS3316P-152	1.5	0.022	120	5.2	4.5
DS3316P-222	2.2	0.032	80	5.0	3.8
DS3316P-332	3.3	0.039	70	3.9	3.3
DS3316P-472	4.7	0.054	40	3.2	2.7
DS3316P-682	6.8	0.075	38	2.8	2.2
DS3316P-103	10	0.101	35	2.4	2.0
DS3316P-153	15	0.150	25	2.0	1.5
DS3316P-223	22	0.207	19	1.6	1.3
DS3316P-333	33	0.334	15	1.4	1.1
DS3316P-473	47	0.472	13	1.0	0.80
DS3316P-683	68	0.660	10	0.9	0.70
DS3316P-104	100	1.11	7	0.8	0.60
DS3316P-154	150	1.55	6	0.6	0.50
DS3316P-224	220	2.00	5	0.5	0.37
DS3316P-105	1000	8.30	2	0.32	0.17

- Part number on reel label may have a B suffix to indicate that the reel is not machine ready.
 - Inductance tested at 0.1 Vrms, 100 kHz, 0 Adc.
 - DC current at which the inductance drops 10% (typ) from its value without current.
 - Average current for a 40°C rise above 25°C ambient.
 - 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.

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Specifications subject to change without notice.

Please check our website for latest information. Document 187-1 Revised 12/10/04

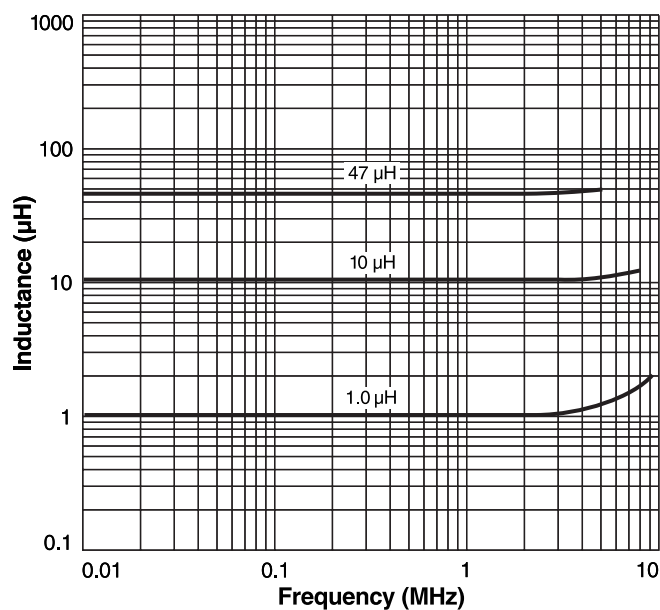
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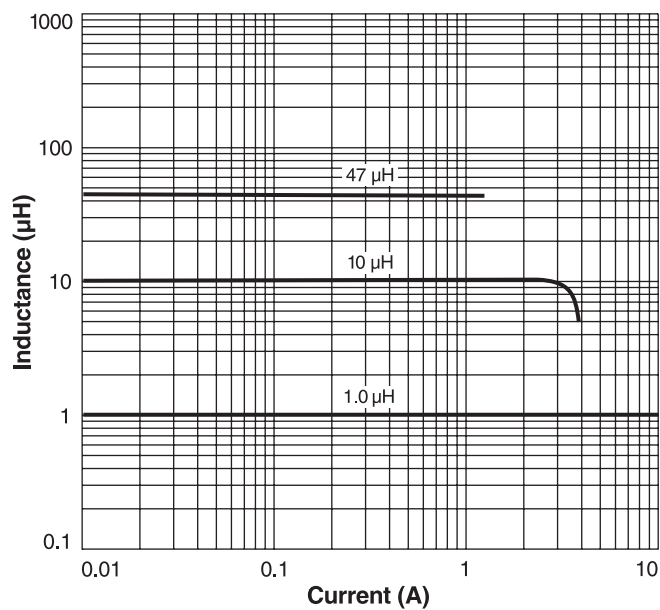


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Typical L vs Frequency



Typical L vs Current



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