

SMT Power Inductors - DS3316 Series



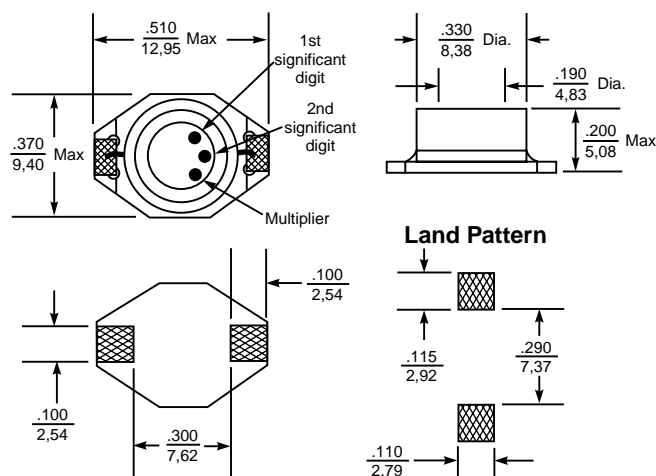
A small footprint, magnetic shielding and high efficiency are features of the DS3316 family of power inductors. They're ideal for high performance DC-DC converter applications, especially those requiring shielding.

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 .018 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>.

PSPICE models SEE DOC 209



Parts/reel: 1000 Tape width: 24 mm

For packaging data see "Tape and Reel Specifications" section (Doc. 173)

Part Number	L $\pm 20\%$ ¹ (μ H)	DCR max (Ohms)	SRF typ (MHz)	Isat ² (A)	Irms ³ (A)
DS3316P-102	1.0	.021	140	5.6	5.0
DS3316P-152	1.5	.022	120	5.2	4.5
DS3316P-222	2.2	.032	80	5.0	3.8
DS3316P-332	3.3	.039	70	3.9	3.3
DS3316P-472	4.7	.054	40	3.2	2.7
DS3316P-682	6.8	.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	0.8

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

1. Inductance tested at 0.1 Vrms, 100 kHz
2. Inductance drop 10% typ. at Isat
3. 40° rise typ. at Irms
4. Operating temperature range -40° C to +85° C
5. Electrical specifications at 25° C

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Specifications subject to change without notice. Document 187 Revised 9/2/99

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