

**NEW!**

# SMT Power Inductors - DH3316 Series



These power inductors feature a small footprint, magnetic shielding and very high efficiency, making them ideal for high performance DC-DC converter applications.

Like all Coilcraft surface mount power inductors, they 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 10 A and rms current ratings as high as 6 A are available. Very low DC resistance keeps power losses to a minimum.

In addition to the standard values shown here, DH3316 inductors in custom values are also available. For free evaluation samples or to order, contact Coilcraft or visit [www.coilcraft.com](http://www.coilcraft.com).

| Part number <sup>1</sup> | L<br>±20% <sup>1</sup><br>(µH) | DCR<br>max<br>(Ohms) | SRF<br>typ <sup>2</sup><br>(MHz) | Isat <sup>3</sup><br>(A) | Irms <sup>4</sup><br>(A) |
|--------------------------|--------------------------------|----------------------|----------------------------------|--------------------------|--------------------------|
| DH3316P-102ML_           | 1.0                            | 0.016                | 290                              | 10.0                     | 6.0                      |
| DH3316P-222ML_           | 2.2                            | 0.020                | 150                              | 6.7                      | 4.1                      |
| DH3316P-332ML_           | 3.3                            | 0.025                | 75                               | 5.7                      | 3.7                      |
| DH3316P-472ML_           | 4.7                            | 0.030                | 55                               | 4.6                      | 3.2                      |
| DH3316P-682ML_           | 6.8                            | 0.048                | 42                               | 3.6                      | 2.6                      |
| DH3316P-103ML_           | 10                             | 0.065                | 37                               | 3.2                      | 2.2                      |
| DH3316P-153ML_           | 15                             | 0.084                | 27                               | 2.6                      | 1.8                      |
| DH3316P-223ML_           | 22                             | 0.126                | 24                               | 2.2                      | 1.6                      |
| DH3316P-333ML_           | 33                             | 0.198                | 17                               | 1.7                      | 1.2                      |
| DH3316P-473ML_           | 47                             | 0.295                | 12                               | 1.5                      | 1.0                      |
| DH3316P-683ML_           | 68                             | 0.415                | 11                               | 1.1                      | 0.90                     |
| DH3316P-104ML_           | 100                            | 0.620                | 9                                | 1.0                      | 0.60                     |
| DH3316P-154ML_           | 150                            | 0.970                | 7                                | 0.8                      | 0.51                     |
| DH3316P-224ML_           | 220                            | 1.270                | 6                                | 0.65                     | 0.44                     |
| DH3316P-334ML_           | 330                            | 1.850                | 5                                | 0.50                     | 0.38                     |
| DH3316P-684ML_           | 680                            | 4.400                | 3                                | 0.35                     | 0.23                     |
| DH3316P-105ML_           | 1000                           | 5.850                | 2.5                              | 0.27                     | 0.22                     |

1. When ordering, please specify **packaging** code:

**DH3316P-105ML D**

**Packaging:** **D** = 13" machine ready reel. EIA-481 embossed plastic tape (1000 parts per full reel).

**B** = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.

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

3. SRF measured using Agilent/HP 8753D network analyzer.

4. DC current at which the inductance drops 10% (typ) from its value without current.

5. Average current for a 40°C rise above 25°C ambient.

6. Operating temperature range -40°C to +85°C

7. 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 303-1 Revised 02/13/06

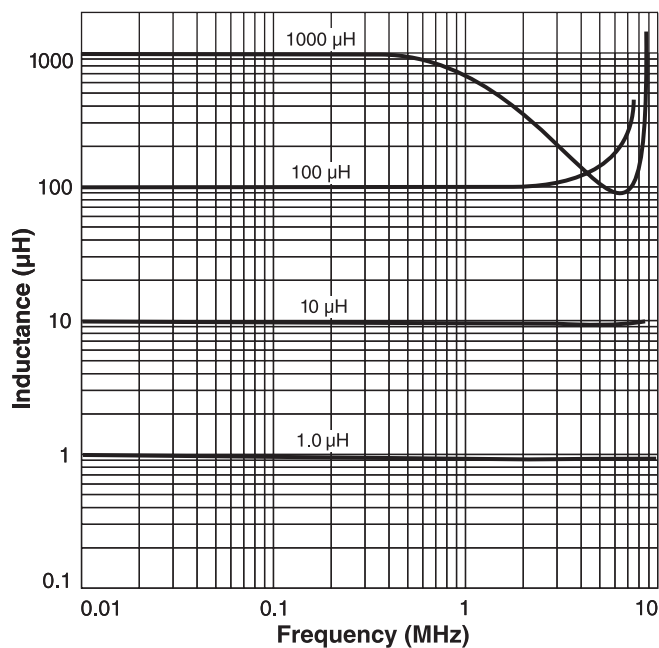
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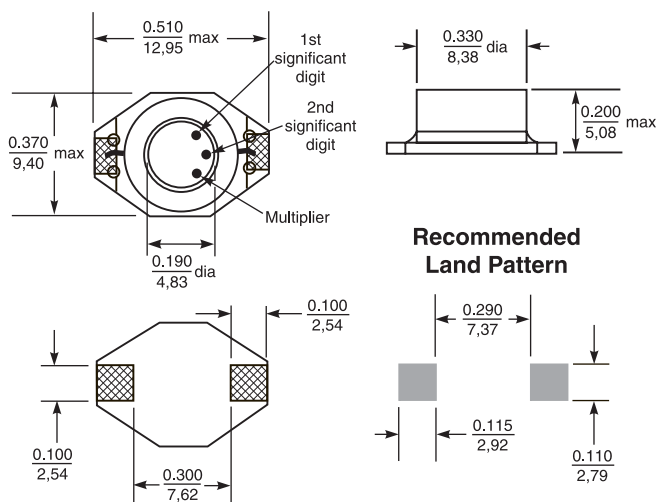
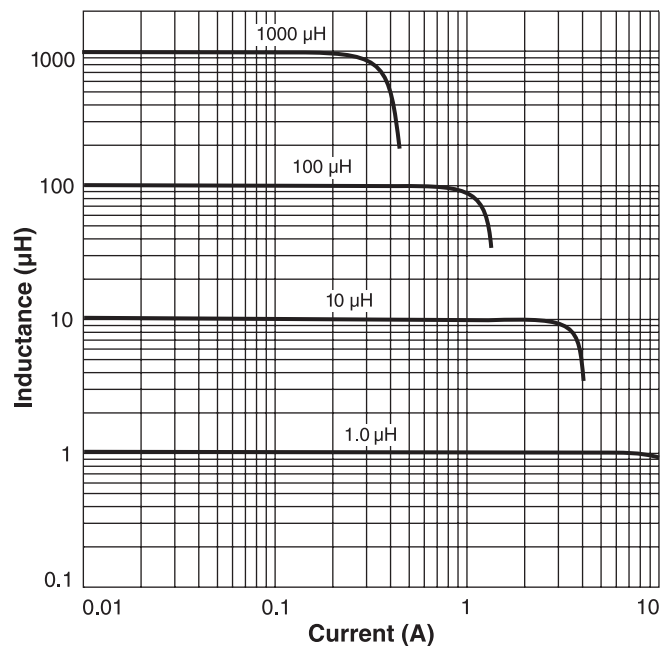

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## Typical L vs Frequency



## Typical L vs Current



**Weight:** 860 – 980 mg

**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.

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Please check our website for latest information. Document 303-2 Revised 01/27/05

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