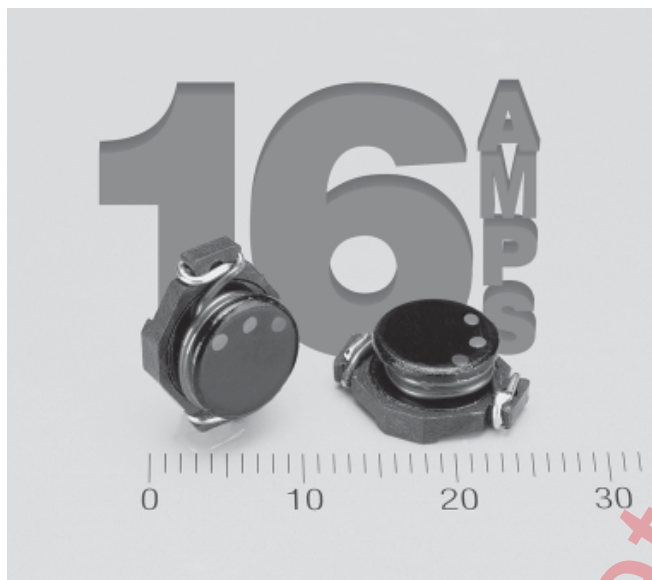


# SMT Power Inductors - DO3316HC Series



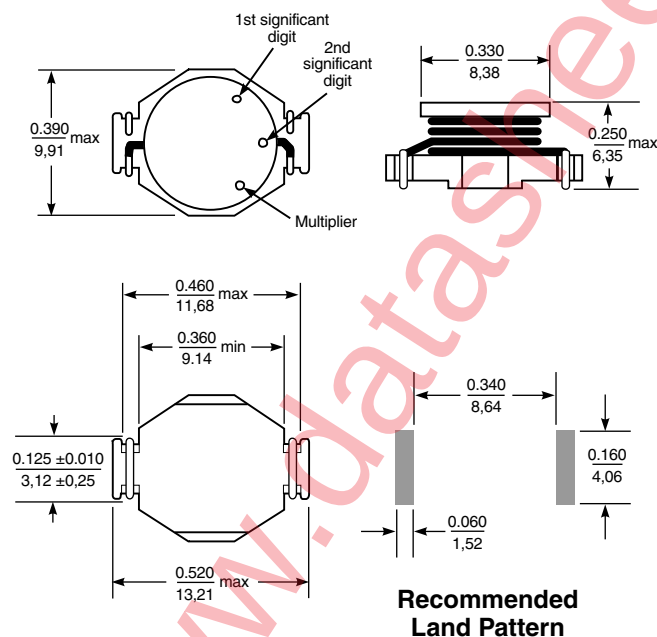
The DO3316HC series has been specially designed for high current, low voltage DC-DC converter applications.

This simple, rugged design provides current ratings normally available only in much larger packages — up to 17 Arms for a 0.12  $\mu\text{H}$  part! With its tinned self-leaded construction, the DO3316HC achieves very low DCR values and excellent solderability. In addition to the standard parts shown, custom values are also available.

The DO3316HC series includes features such as tape and reel packaging and a flat top for pick-and-place handling that are standard in all Coilcraft SMT power products.

Coilcraft **Designer's Kit C126** contains three samples each of the standard parts shown. To order, contact Coilcraft or purchase the kit on-line at <http://order.coilcraft.com>.

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



**Weight:** 0.95 – 1.25 g

**Tape and reel:** 750/13" reel 24 mm tape width

For packaging data see Tape and Reel Specifications section.

| Part number <sup>1</sup> | L $\pm 20\%$ <sup>2</sup><br>( $\mu\text{H}$ ) | DCR max<br>(Ohms) | SRF <sup>3</sup><br>typ<br>(MHz) | Isat <sup>4</sup><br>(A) | Irms <sup>5</sup><br>(A) |
|--------------------------|------------------------------------------------|-------------------|----------------------------------|--------------------------|--------------------------|
| DO3316P-121HC            | 0.12                                           | 0.0015            | 200                              | 28                       | 17                       |
| DO3316P-331HC            | 0.33                                           | 0.002             | 200                              | 20                       | 16                       |
| DO3316P-681HC            | 0.68                                           | 0.005             | 200                              | 13                       | 12                       |
| DO3316P-102HC            | 1.0                                            | 0.006             | 100                              | 11                       | 10                       |
| DO3316P-152HC            | 1.5                                            | 0.008             | 90                               | 9.0                      | 9.0                      |
| DO3316P-222HC            | 2.2                                            | 0.011             | 80                               | 7.8                      | 7.4                      |
| DO3316P-272HC            | 2.7                                            | 0.012             | 65                               | 7.0                      | 6.6                      |
| DO3316P-332HC            | 3.3                                            | 0.014             | 60                               | 6.4                      | 5.9                      |
| DO3316P-392HC            | 3.9                                            | 0.015             | 50                               | 5.9                      | 5.3                      |
| DO3316P-472HC            | 4.7                                            | 0.018             | 45                               | 5.4                      | 4.8                      |

1. Part number on reel label may have a B suffix to indicate that the reel is not machine ready.
2. Inductance tested at 100 kHz, 0.1 Vrms, 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.

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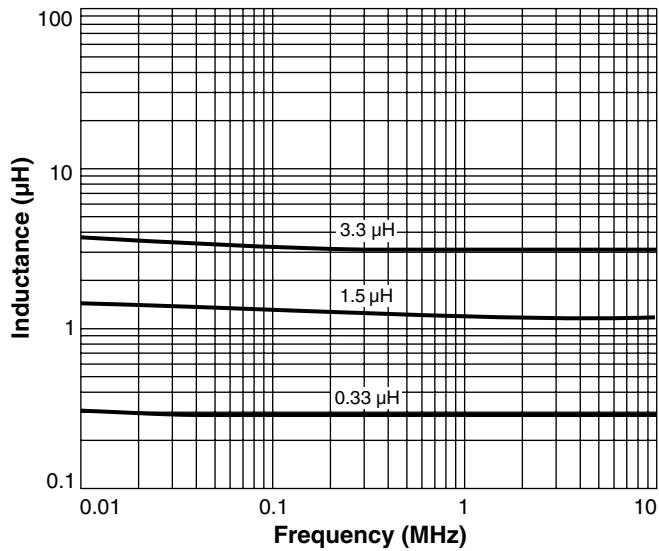
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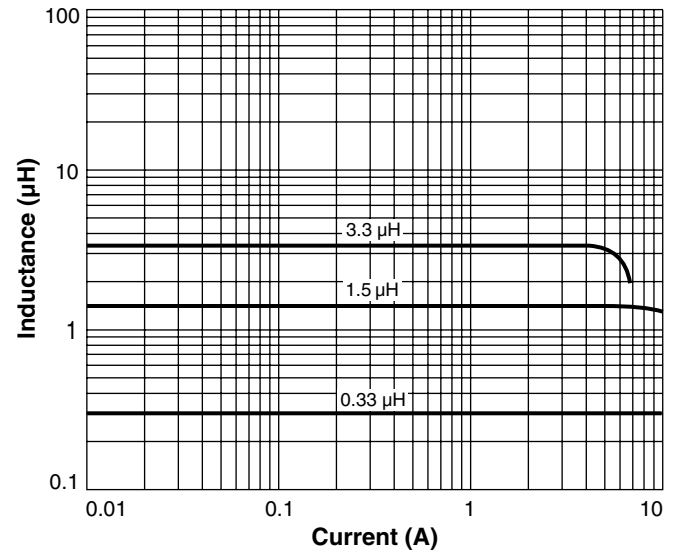
E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>

# SMT Power Inductors - DO3316HC Series

## Typical L vs Frequency



## Typical L vs Current



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