



SMT Power Inductors - DO3316H Series



- Soldered self-leaded construction for excellent solderability.
- Very low DCR values and excellent current handling

Designer's Kit C326 contains 3 of each part

Core material Ferrite

Core and winding loss See www.coilcraft.com/coreloss

Terminations RoHS compliant tin-silver-copper over copper. Other terminations available at additional cost.

Weight 0.95– 1.25 g

Ambient temperature –40°C to +85°C with Irms current

Maximum part temperature +125°C (ambient + temp rise). [Derating](#).

Storage temperature Component: –40°C to +125°C.

Tape and reel packaging: –40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Packaging 750 per 13" reel Plastic tape: 24 mm wide, 0.35 mm thick, 12 mm pocket spacing, 6.4 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

| Part number ¹ | L ² (μH) | % tol ³ | DCR max (Ohms) | SRF ⁴ typ (MHz) | Isat ⁵ (A) | Irms ⁶ (A) |
|--------------------------|------------------------|-----------------------|----------------------|----------------------------------|--------------------------|--------------------------|
| DO3316H-121ML_ | 0.12 | 20 | 0.0015 | 200 | 28 | 17 |
| DO3316H-331ML_ | 0.33 | 20 | 0.002 | 200 | 20 | 16 |
| DO3316H-681ML_ | 0.68 | 20 | 0.005 | 200 | 13 | 12 |
| DO3316H-102ML_ | 1.0 | 20 | 0.006 | 100 | 11 | 10 |
| DO3316H-152ML_ | 1.5 | 20 | 0.008 | 90 | 9.0 | 9.0 |
| DO3316H-222_L_ | 2.2 | 20,10 | 0.011 | 80 | 7.8 | 7.4 |
| DO3316H-272_L_ | 2.7 | 20,10 | 0.012 | 65 | 7.0 | 6.6 |
| DO3316H-332_L_ | 3.3 | 20,10 | 0.014 | 60 | 6.4 | 5.9 |
| DO3316H-392_L_ | 3.9 | 20,10 | 0.015 | 50 | 5.9 | 5.3 |
| DO3316H-472_L_ | 4.7 | 20,10 | 0.018 | 45 | 5.4 | 4.8 |

1. When ordering, specify **tolerance**, **termination** and **packaging** codes:

DO3316H-472MLD

Tolerance: **M** = 20%, **K** = 10% (Table shows stock tolerances in bold.)

Termination: **L** = RoHS compliant tin-silver-copper over copper.

Special order: **S** = non-RoHS tin-lead (63/37).

Packaging: **D** = 13" machine-ready reel. EIA-481 embossed plastic tape (750 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D.

- Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.
- Tolerances in bold are stocked for immediate shipment.
- SRF measured using Agilent/HP 8753D network analyzer.
- DC current at 25°C that causes an inductance drop of 10% (typ) from its value without current. [Click for temperature derating information](#).
- Current that causes a 40°C temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings. [Click for temperature derating information](#)
- Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

SPICE models
ON OUR WEB SITE



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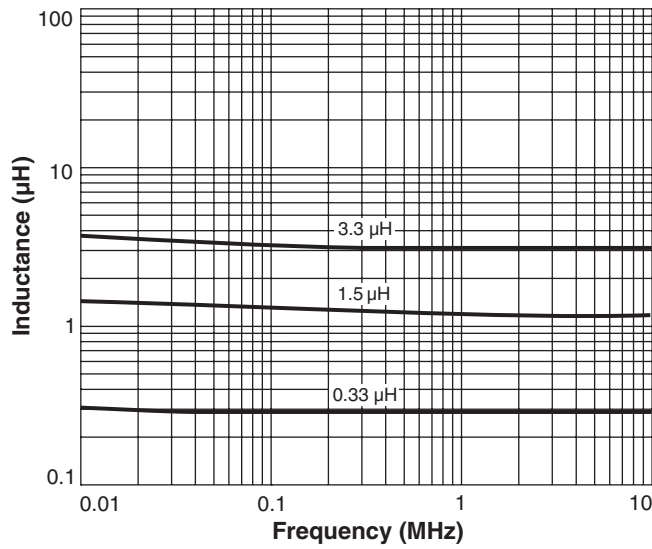
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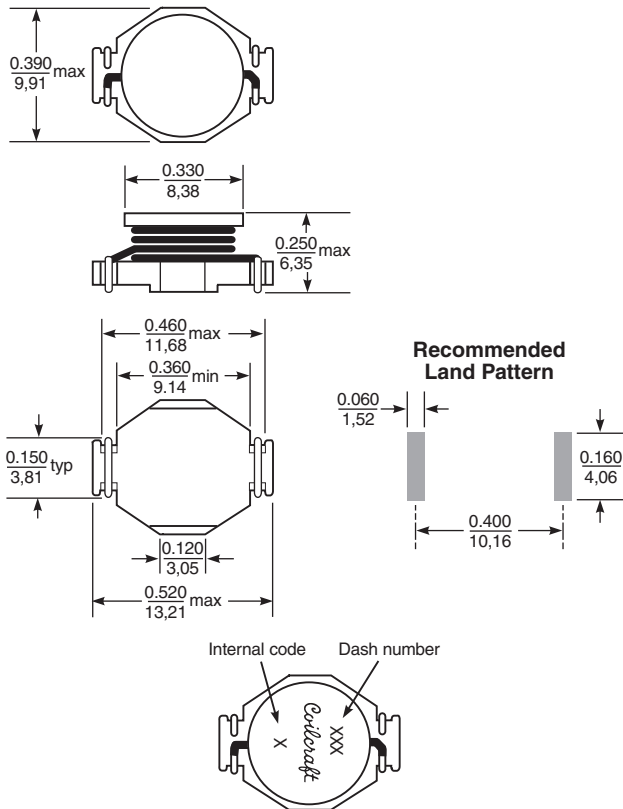
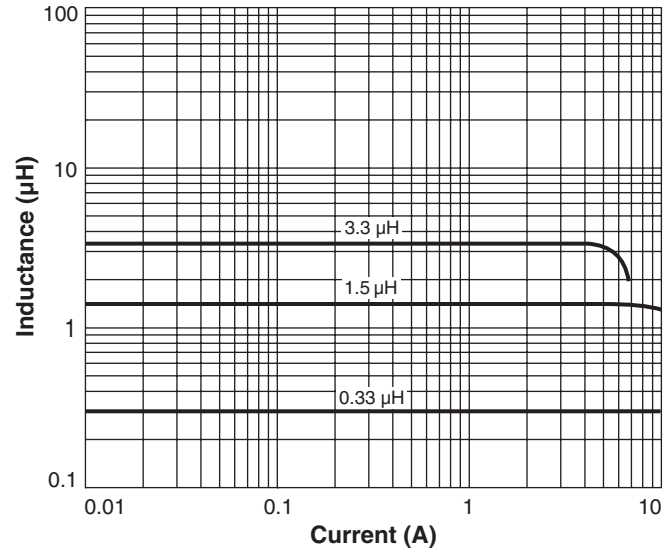


SMT Power Inductors - DO3316H Series

Typical L vs Frequency



Typical L vs Current



Dimensions are in inches/mm



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