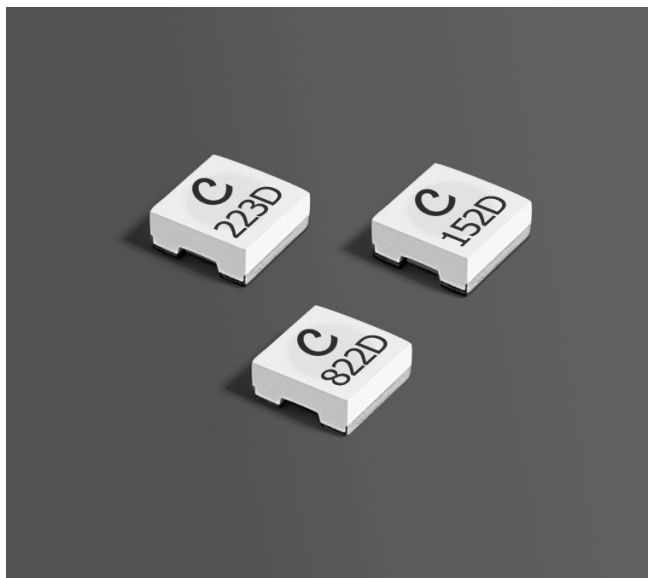




SMT Power Inductors - DO3314



- Only 3.3 mm square, 1.4 mm high!
- Handles current up to 1.7 Amps rms

Designer's Kit C358 contains 3 each of all values

Core material Ferrite

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

Terminations RoHS compliant silver-palladium-platinum-glass frit. Other terminations available at additional cost.

Weight 45.9– 50.2 mg

Ambient temperature –40°C to +85°C with Irms current, +85°C to +125°C with derated current

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)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 1000/7" reel; 3500/13" reel Plastic tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 1.37 mm pocket depth

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

| Part number ¹ | L ² ±20% (µH) | DCR ³ max (Ohms) | SRF ⁴ typ (MHz) | Isat ⁵ (A) | Irms ⁶ (A) |
|--------------------------|--------------------------------|-----------------------------------|----------------------------------|--------------------------|--------------------------|
| DO3314-102ML_ | 1.0 | 0.11 | 160 | 2.10 | 1.70 |
| DO3314-152ML_ | 1.5 | 0.14 | 140 | 2.00 | 1.40 |
| DO3314-222ML_ | 2.2 | 0.20 | 90 | 1.60 | 1.30 |
| DO3314-332ML_ | 3.3 | 0.26 | 80 | 1.40 | 1.20 |
| DO3314-472ML_ | 4.7 | 0.32 | 60 | 1.20 | 1.10 |
| DO3314-682ML_ | 6.8 | 0.44 | 45 | 0.92 | 0.80 |
| DO3314-822ML_ | 8.2 | 0.47 | 45 | 0.90 | 0.75 |
| DO3314-103ML_ | 10 | 0.52 | 40 | 0.80 | 0.75 |
| DO3314-153ML_ | 15 | 0.86 | 30 | 0.68 | 0.65 |
| DO3314-223ML_ | 22 | 1.20 | 20 | 0.56 | 0.50 |
| DO3314-333ML_ | 33 | 1.62 | 15 | 0.51 | 0.40 |

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

DO3314-333MLC

Termination: L = RoHS compliant silver-palladium-platinum-glass frit
Special order: T = RoHS tin-silver-copper (95.5/4/0.5)
or S = non-RoHS tin-lead (63/37).

Packaging: C = 7" 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 C instead.

D = 13" machine-ready reel. EIA-481 embossed plastic tape (3500 parts per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms.

3. DCR measured on a micro-ohmmeter.

4. SRF measured using Agilent/HP 4191A or equivalent.

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

6. Current that causes a 40°C temperature rise from 25°C ambient.

7. 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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Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 295-1 Revised 10/08/08

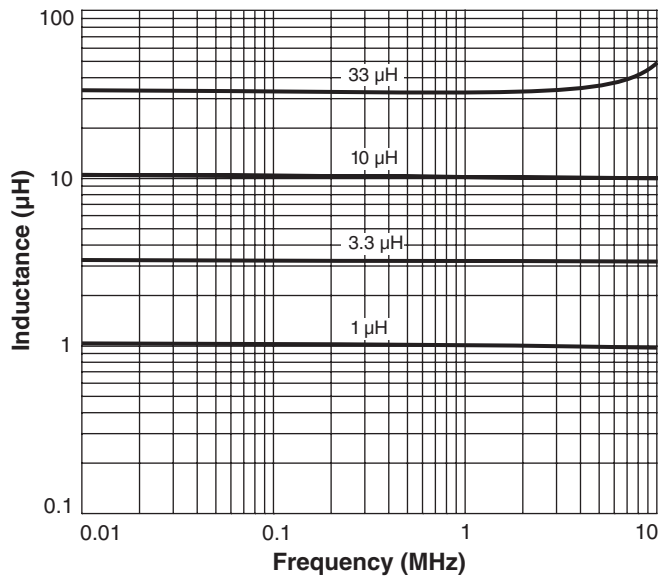
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This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

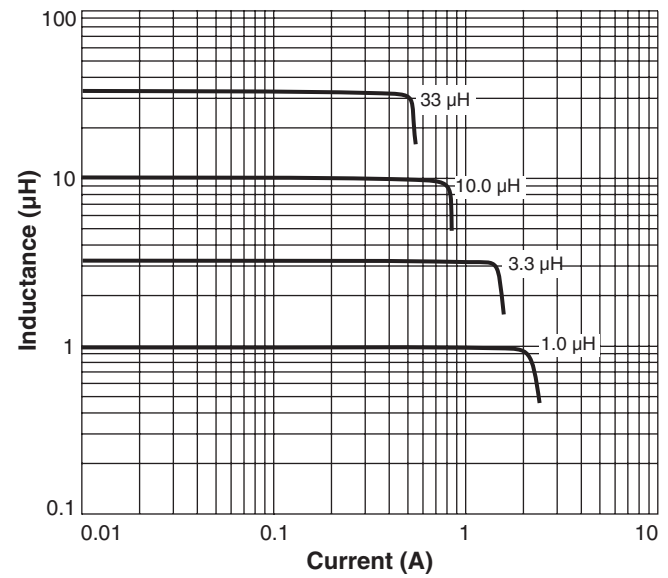


SMT Power Inductors - DO3314 Series

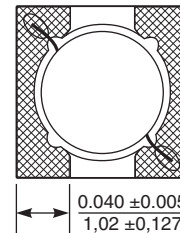
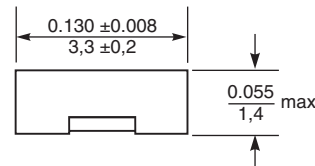
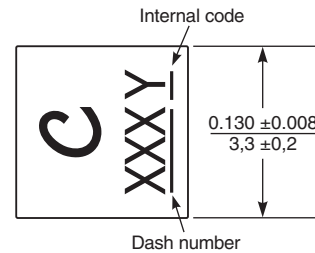
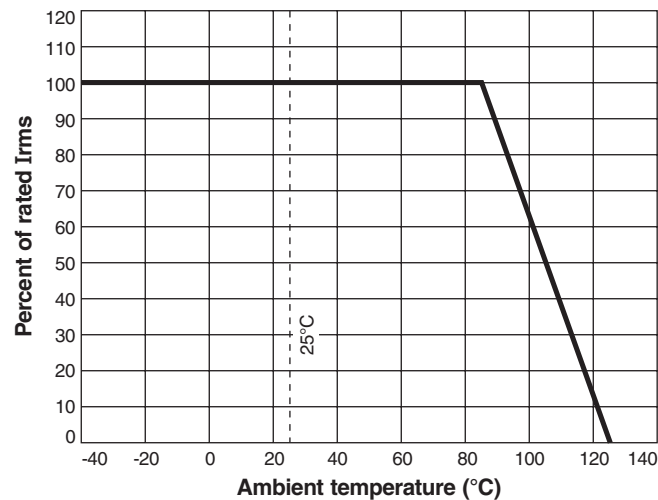
Typical L vs Frequency



Typical L vs Current



Irms Derating



Dimensions are in $\frac{\text{inches}}{\text{mm}}$

Recommended Land Pattern

