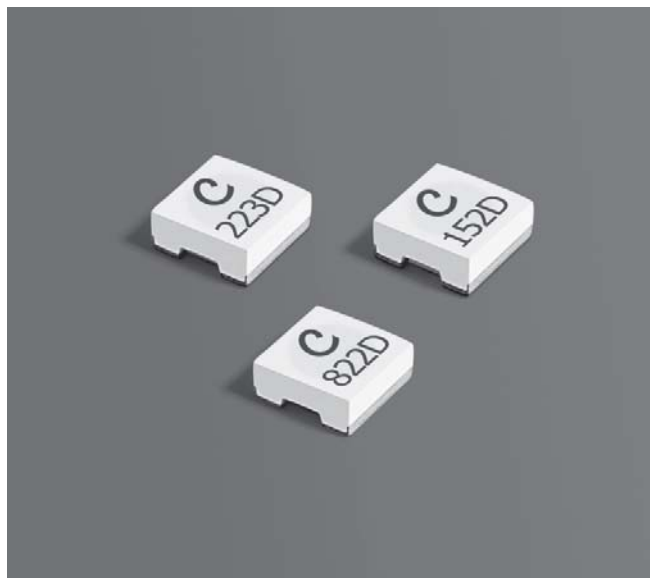




SMT Power Inductors - DO3314 Series



- 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 I_{rms} current, +85°C to +125°C with derated current

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

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 Only pure water or alcohol recommended

Part number ¹	L^2 ±20% (µH)	DCR ³ max (Ohms)	SRF ⁴ typ (MHz)	Isat ⁵ (A)	I_{rms}^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:

DO3314-333ML C

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 OR CD

Coilcraft®

Specifications subject to change without notice.
Please check our website for latest information.

Document 295-1 Revised 10/08/08

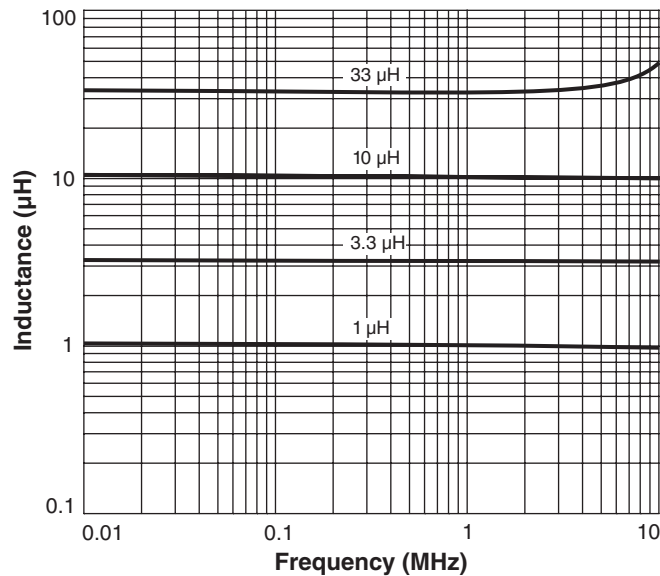
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail info@coilcraft.com Web <http://www.coilcraft.com>

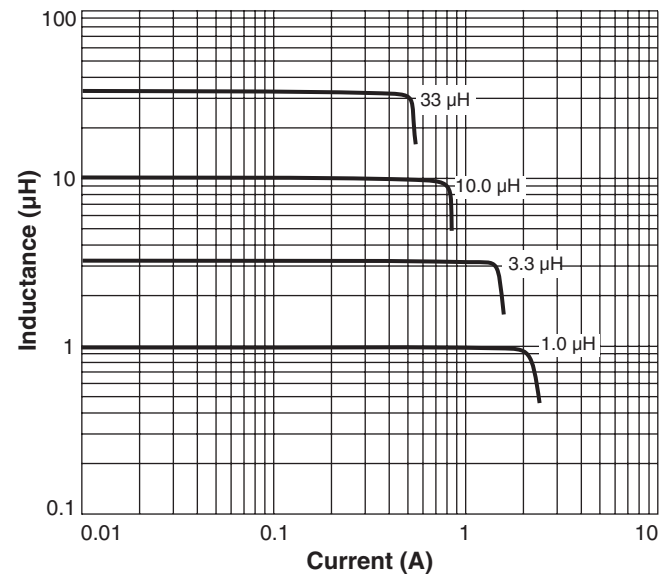


SMT Power Inductors - DO3314 Series

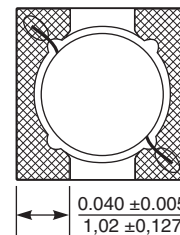
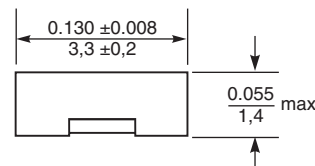
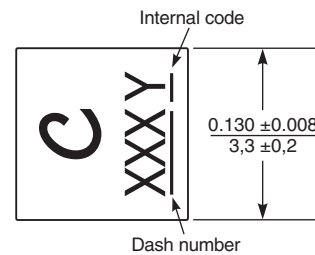
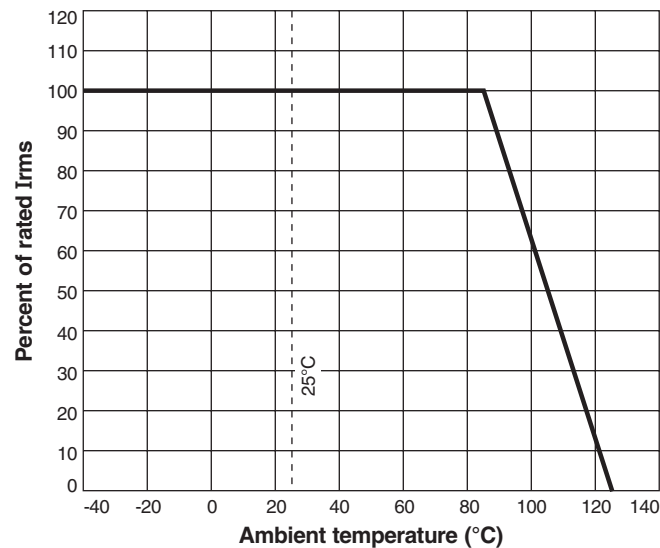
Typical L vs Frequency



Typical L vs Current

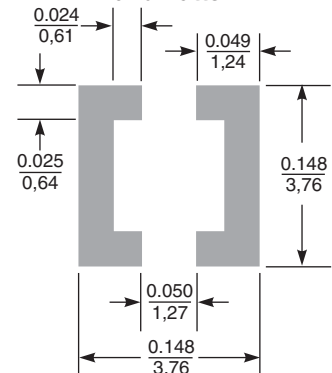


Irms Derating



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

Recommended Land Pattern



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