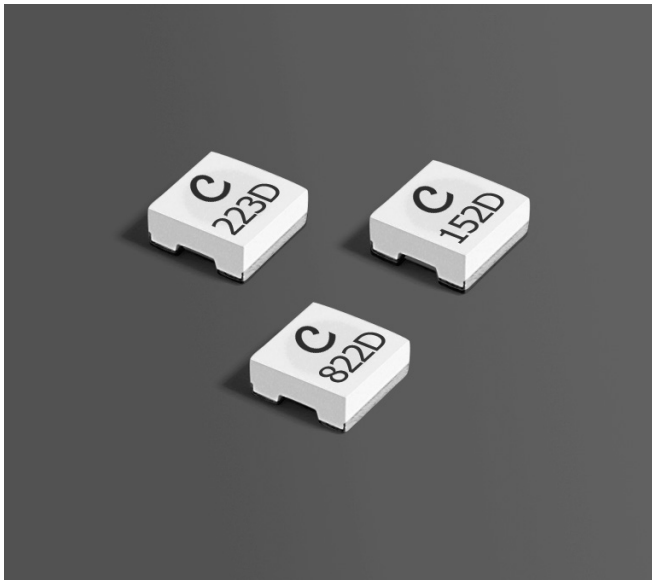
SMT Power Inductors - DO3314



- 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
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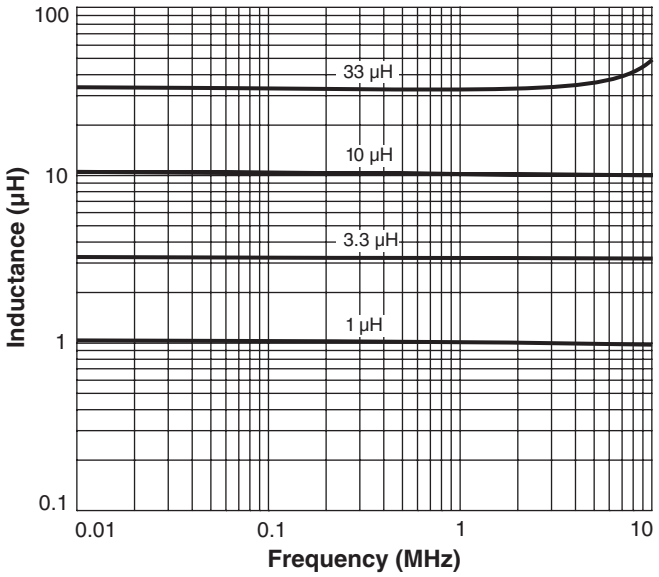
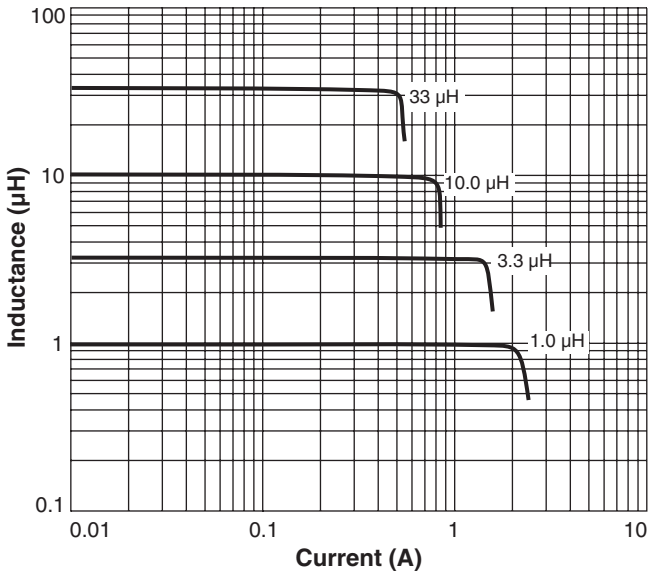
SMT Power Inductors - DO3314 Series

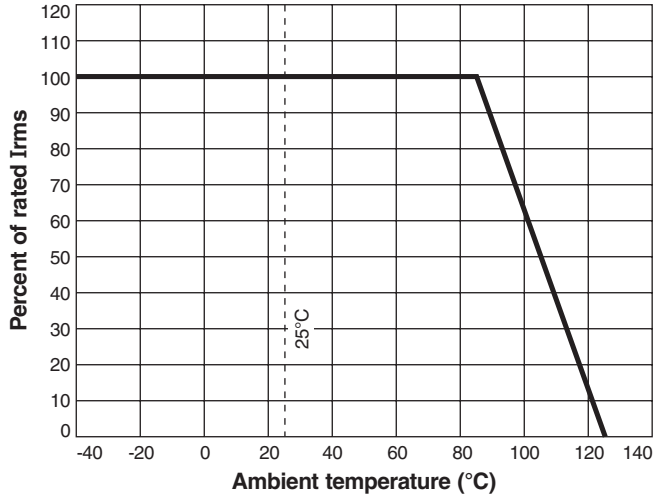
Typical L vs Frequency

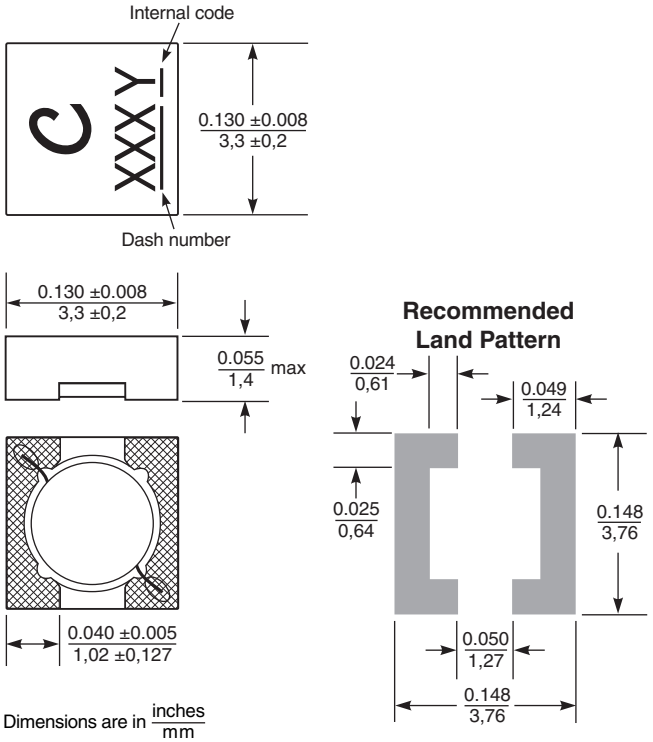


Typical L vs Current



Irms Derating





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