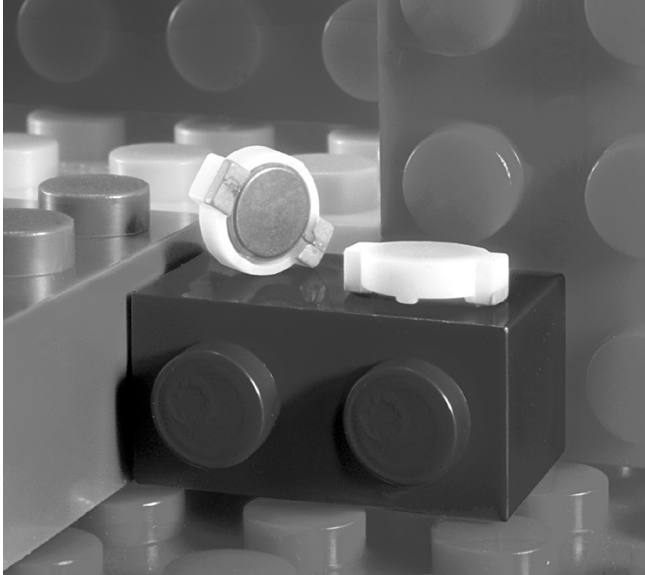


SMT Power Inductors - DO1606T



- Only 2.0 mm high
- Handles current up to 2.3 Amps rms

Designer's Kit C338 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 116– 136 mg

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

Maximum part temperature +125°C (ambient + temp rise)

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 750/7" reel; 2500/13" reel Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 2.5 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 ±20% ² (µH)	DCR max (Ohms)	SRF ref (MHz)	Isat ³ (A)	Irms ⁴ (A)
DO1606T-102ML_	1.0	0.04	230	2.5	2.3
DO1606T-152ML_	1.5	0.06	180	2.2	2.1
DO1606T-222ML_	2.2	0.07	140	1.8	1.7
DO1606T-332ML_	3.3	0.12	110	1.4	1.3
DO1606T-472ML_	4.7	0.15	100	1.2	1.1
DO1606T-682ML_	6.8	0.20	80	1.1	1.0
DO1606T-822ML_	8.2	0.23	70	1.0	0.95
DO1606T-103ML_	10	0.30	60	1.0	0.90
DO1606T-153ML_	15	0.40	45	0.8	0.70
DO1606T-223ML_	22	0.54	35	0.6	0.50
DO1606T-333ML_	33	0.74	30	0.5	0.45
DO1606T-473ML_	47	1.1	22	0.45	0.40
DO1606T-683ML_	68	1.6	20	0.35	0.35
DO1606T-104ML_	100	2.3	15	0.30	0.30
DO1606T-154ML_	150	3.5	10	0.25	0.25
DO1606T-224ML_	220	5.7	9	0.20	0.18
DO1606T-334ML_	330	8.2	8	0.16	0.16
DO1606T-474ML_	470	10.8	7	0.14	0.12
DO1606T-684ML_	680	17.2	5	0.12	0.10
DO1606T-105ML_	1000	22.6	4	0.08	0.08

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

DO1606T-105MLC

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 (750 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 (2500 parts per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Vdc.

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

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

5. Electrical specifications at 25°C.

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

SPICE models
ON OUR WEB SITE



www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com

UK +44-1236-730595 sales@coilcraft-europe.com

Taiwan +886-2-2264 3646 sales@coilcraft.com.tw

China +86-21-6218 8074 sales@coilcraft.com.cn

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

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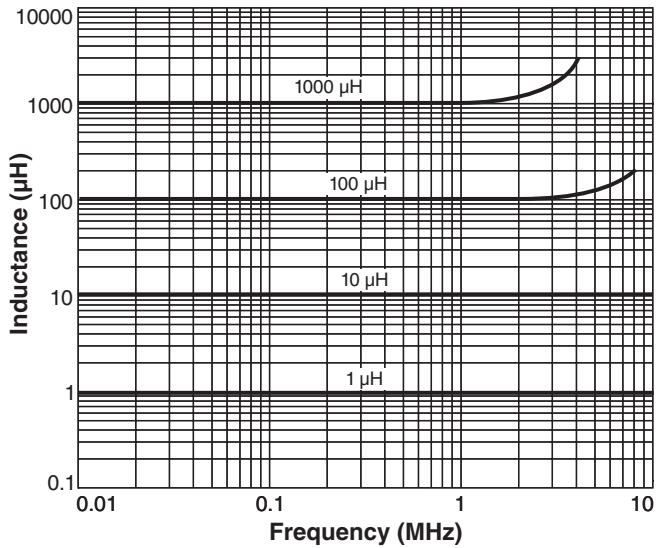
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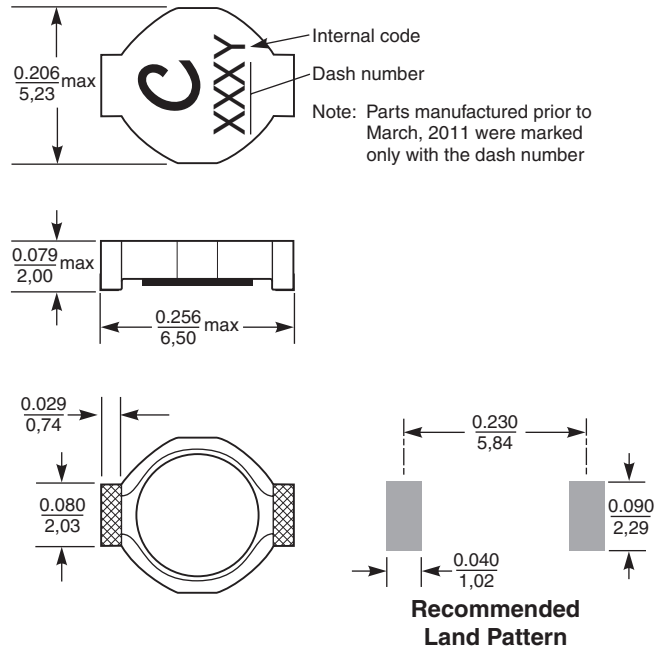
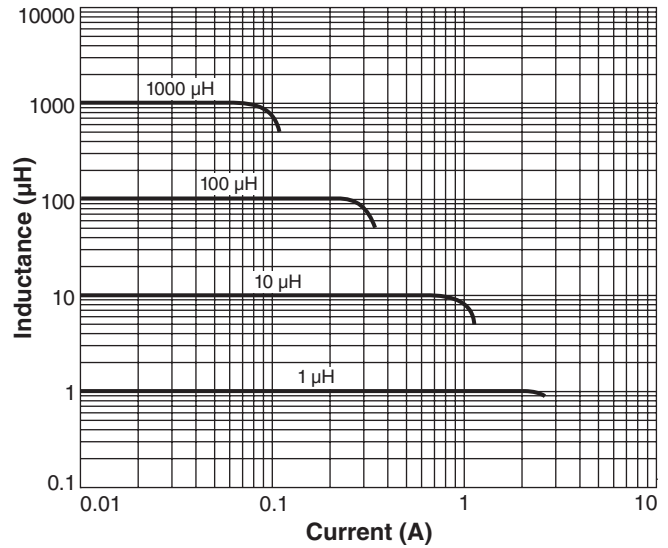


SMT Power Inductors – DO1606T Series

Typical L vs Frequency



Typical L vs Current



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



US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

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