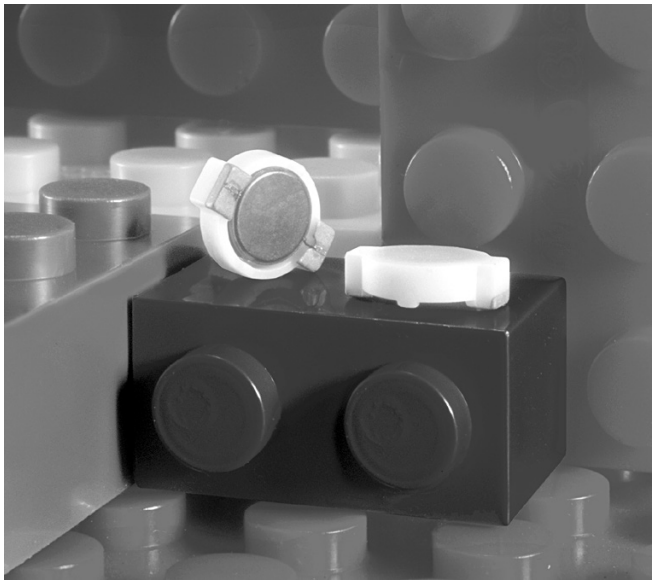
SMT Power Inductors - DO1606T



- 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)

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). 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 C.

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

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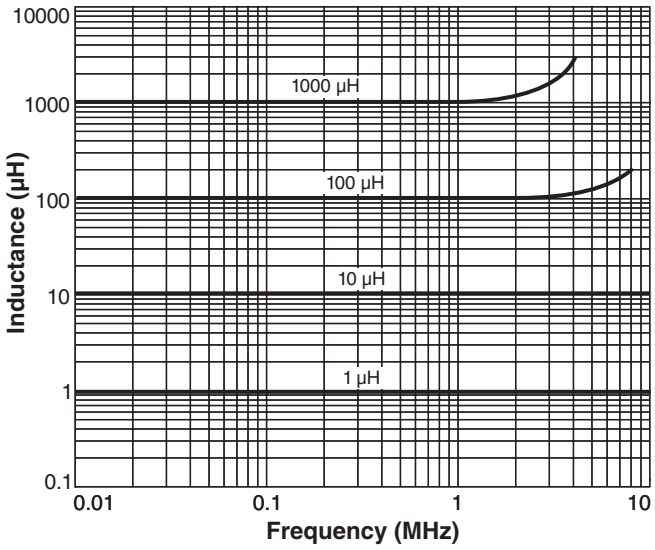
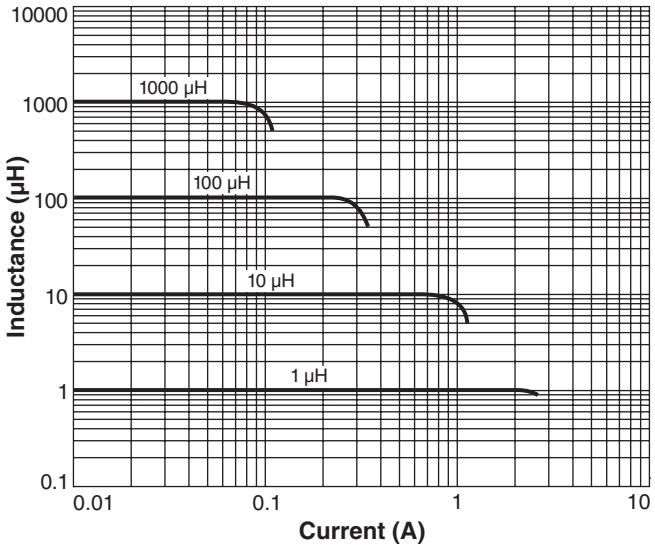
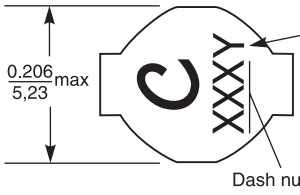
SMT Power Inductors–DO1606T Series

Typical L vs Frequency

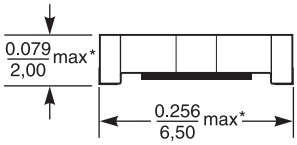


Typical L vs Current

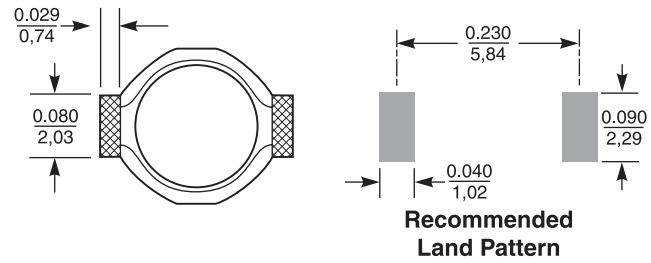




Note: Parts manufactured prior to March, 2011 were marked only with the dash number



* Allow an additional 0.01 / 0,254 in length and 0.005 / 0,127 in height for optional tin-lead and tin-silver-copper application.



Recommended Land Pattern

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

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Specification subject to change without notice.
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