



SMT Power Inductors – DO1813H Series



- High-current power inductance; up to 14 A saturating current
- Rugged self-leaded construction for reliable soldering

Designer's Kit C331 contains 3 of each part

Core material Ferrite

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

Terminations RoHS compliant tin-silver over copper. Other terminations available at additional cost.

Weight 278– 315 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 per 13" reel Plastic tape: 16 mm wide, 0.3 mm thick, 12 mm pocket spacing, 5.4 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number ¹	L ref (μH)	L typ ±20% ² (μH)	DCR max (Ohms)	SRF typ (MHz)	Isat ³ (A)	Irms ⁴ (A)
DO1813H-181ML_	0.18	0.18	0.003	800	14.0	10.0
DO1813H-331ML_	0.33	0.33	0.004	600	10.0	7.0
DO1813H-561ML_	0.56	0.56	0.010	200	7.7	6.0
DO1813H-122ML_	1.2	1.15	0.017	140	5.3	4.4
DO1813H-222ML_	2.2	2.06	0.035	100	3.5	3.1
DO1813H-332ML_	3.3	3.20	0.040	80	3.0	2.7
DO1813H-472ML_	4.7	4.70	0.054	50	2.6	2.2
DO1813H-682ML_	6.8	6.80	0.080	45	2.2	1.8
DO1813H-822ML_	8.2	8.20	0.092	42	2.0	1.6
DO1813H-103ML_	10.0	9.55	0.11	40	1.9	1.5
DO1813H-153ML_	15.0	15.3	0.17	30	1.5	1.2
DO1813H-223ML_	22.0	22.6	0.25	25	1.2	1.0
DO1813H-333ML_	33.0	32.5	0.35	20	0.99	0.82
DO1813H-473ML_	47.0	48.1	0.47	15	0.87	0.72

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

DO1813H-473MLD

Termination: L = RoHS compliant tin-silver over copper.

Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).

Packaging: D = 13" 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 D instead.

2. Inductance tested at 0.25 Vrms, 100 kHz, 0 Adc.

3. DC current at which the inductance drops 30% (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

Document 207-1 Revised 10/08/08

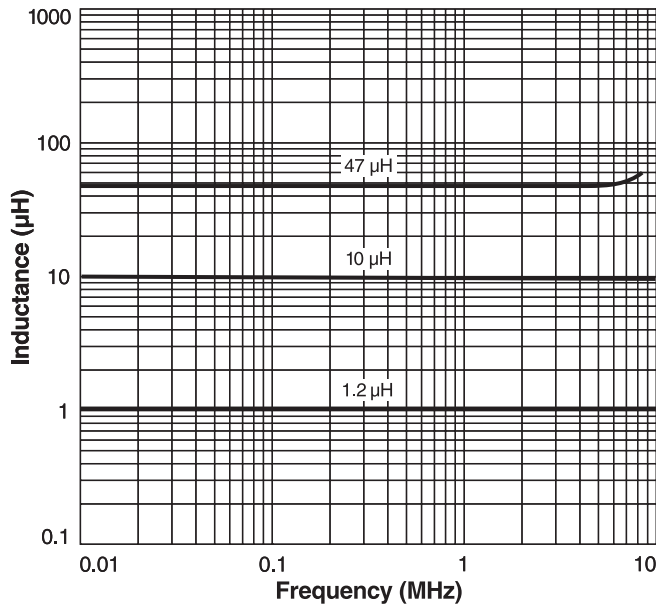
© Coilcraft Inc. 2011

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

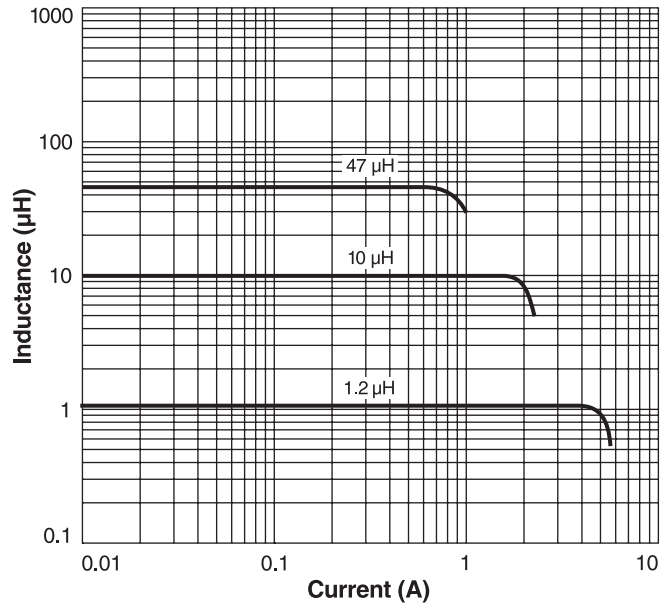


SMT Power Inductors - DO1813H Series

Typical L vs Frequency



Typical L vs Current



Irms Derating

