NEW!

SMT Power Inductors - DO3316T Series

The DO3316T series has been specially designed for high current applications at ambient temperatures up to 155°C.

These parts have passed AEC-Q200 qualification testing and are ideal for a variety of automotive applications.

This simple, rugged design provides current ratings normally available only in much larger packages — up to 16 Arms for a 0.33 µH part! With its soldered self-leaded construction, the DO3316T achieves very low DCR values and excellent solderability. In addition to the standard parts shown, custom values are also available.

Coilcraft **Designer's Kit C396** contains three samples each of the standard parts shown. To order, contact Coilcraft or visit **http://order.coilcraft.com**.

Part number[1]	L ±20%[2] (µH)	DCR max (Ohms)	SRF[3] typ (MHz)	Isat[4] (A)	Irms[5] (A)
DO3316T-331ML_	0.33	0.002	200	20	16
DO3316T-681ML_	0.68	0.005	200	13	12
DO3316T-102ML_	1.0	0.006	100	11	10
DO3316T-152ML_	1.5	0.008	90	9	9
DO3316T-222ML_	2.2	0.011	90	7.8	7.4
DO3316T-272ML_	2.7	0.012	65	7.0	6.6
DO3316T-332ML_	3.3	0.014	60	6.4	5.9
DO3316T-392ML_	3.9	0.015	50	5.9	5.3
DO3316T-472ML_	4.7	0.018	50	5.4	4.8
DO3316T-562ML_	5.6	0.021	45	4.7	4.65
DO3316T-682ML_	6.8	0.024	43	4.4	4.40
DO3316T-822ML_	8.2	0.032	34	4.0	4.15
DO3316T-103ML_	10	0.034	31	3.9	3.90
DO3316T-123ML_	12	0.036	27	3.4	3.50
DO3316T-153ML_	15	0.045	25	3.1	3.10
DO3316T-183ML_	18	0.050	22	2.8	2.90
DO3316T-223ML_	22	0.070	18	2.5	2.70
DO3316T-273ML_	27	0.085	18	2.3	2.30
DO3316T-333ML_	33	0.100	17	2.0	2.10
DO3316T-393ML_	39	0.120	15	1.8	1.95
DO3316T-473ML_	47	0.150	14	1.65	1.80
DO3316T-563ML_	56	0.165	12	1.45	1.65
DO3316T-683ML_	68	0.220	11	1.40	1.50
DO3316T-823ML_	82	0.250	10	1.30	1.40
DO3316T-104ML_	100	0.280	9.0	1.20	1.30
DO3316T-124ML_	120	0.400	8.0	1.00	1.00
DO3316T-154ML_	150	0.460	6.0	0.90	0.90
DO3316T-184ML_	180	0.520	6.0	0.85	0.85
DO3316T-224ML_	220	0.700	5.0	0.80	0.80
DO3316T-274ML_	270	0.800	5.0	0.75	0.70
DO3316T-334ML_	330	1.07	4.5	0.60	0.60
DO3316T-394ML_	390	1.14	4.0	0.62	0.55
DO3316T-474ML_	470	1.27	3.5	0.50	0.50

1. When ordering, please specify **packaging** code:

   DO3316T-474ML D

   Packaging: **D** = 13″ 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.
2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc.
3. SRF measured using Agilent/HP 8753D network analyzer.
4. DC current at which the inductance drops 10% (typ) from its value without current.
5. Current that causes a 40°C temperature rise from 25°C ambient.
6. **Ambient temperature range:** –40°C to +155°C with Irms current
   +155°C to +195°C with derated current
7. **Storage temperature range:** Component: –55°C to +155°C
   Packaging: –55°C to +80°C
8. **Resistance to soldering heat:** Three reflows at >217°C for 90 seconds (+260°C ±5°C for 20 – 40 seconds), allowing parts to cool to room temperature between.
9. Electrical specifications at 25°C.

See Qualification Standards section for environmental and test data.
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

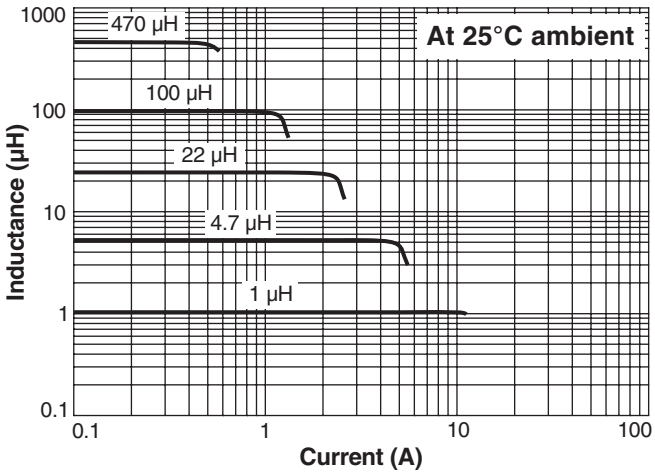
1102 Silver Lake Road Cary, Illinois 60013 **Phone** 847/639-6400 **Fax** 847/639-1469
E-mail info@coilcraft.com **Web** http://www.coilcraft.com

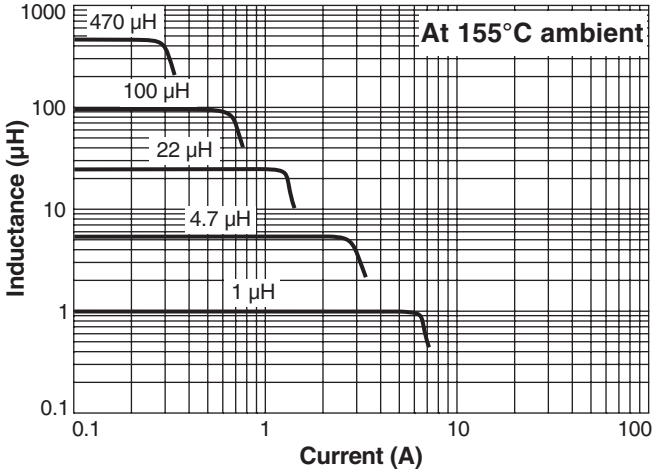
NEW!

RoHS COMPLIANT

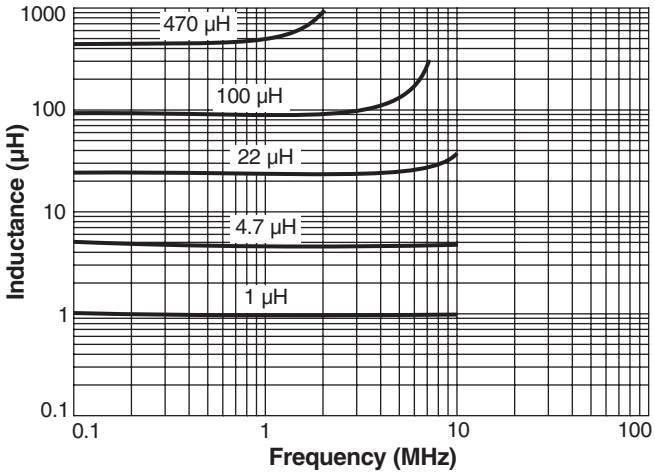
SMT Power Inductors - DO3316T Series

Typical L vs Current

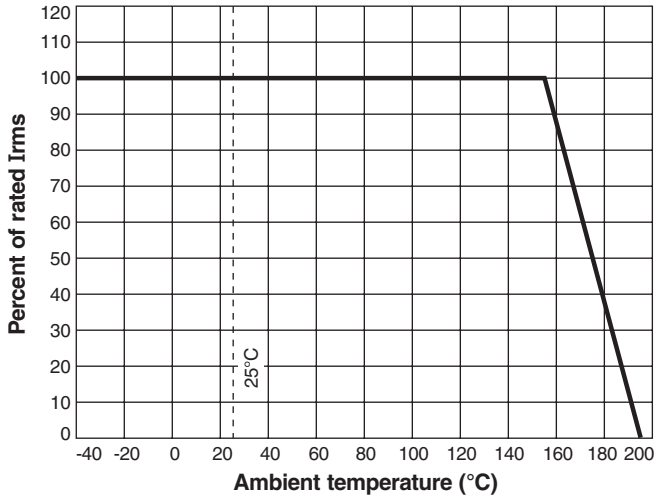


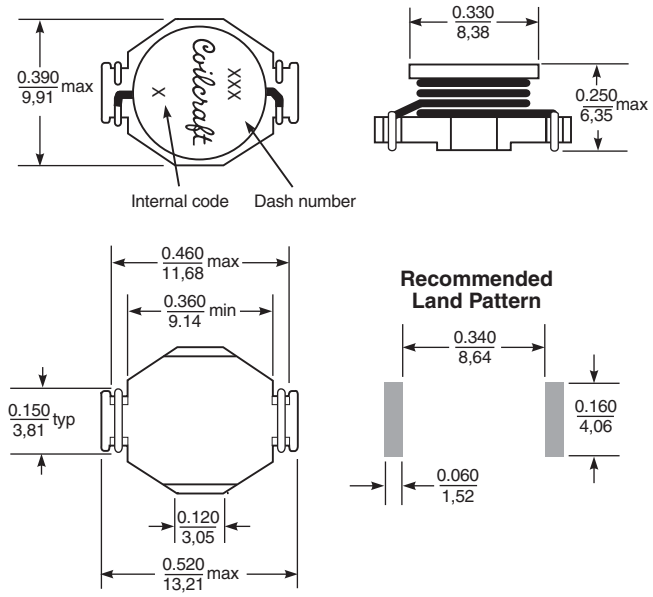


Typical L vs Frequency



Irms Derating





Weight: 0.95 – 1.25 g
Termiantions: Tin-silver over copper
Tape and reel: 750/13″ reel 24 mm tape width
For packaging data see Tape and Reel Specifications section.

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