



SMTDR SERIES

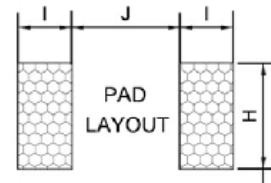
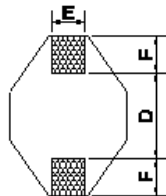
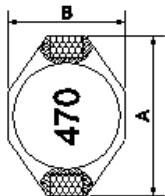
UNSHIELDED SMT POWER INDUCTORS

Applications :

- Portable telephones.
- Personable computers.
- DC/DC converters, etc.
- Other various electronic appliances.



Shape and Dimensions (Dimensions are in mm) :



Item	A Max.	B Max.	C Max.	D
SMTDR0402	6.60	4.45	2.92	4.32
SMTDR0802	12.95	9.40	3.50	7.62
SMTDR0804	12.95	9.40	5.21	7.62
SMTDR0810	12.95	9.40	11.43	7.62
SMTDR1206	18.54	15.24	7.11	12.7

Item	E	F	H	I	J
SMTDR0402	1.27	1.02	3.56	1.4	4.06
SMTDR0802	2.54	2.54	2.79	2.92	7.37
SMTDR0804	2.54	2.54	2.79	2.92	7.37
SMTDR0810	2.54	2.54	2.79	2.92	7.37
SMTDR1206	2.54	2.54	2.79	2.92	12.45

Features :

- High power, High saturation, Low resistance.
- Ideal inductors for DC-DC conversion in notebook computer, PDAs, Step-up or step-down converters, flash memory programmers, etc.
- SMTDR0402 used ceramic base with gold-plating.
- The others used LCP plastic base.

Characteristics :

- Saturation Current (Isat): The current when the inductance becomes 10% lower than its initial value. (Ta=20°C)
- Temperature Rise Current (Irms): The current when temperature of coil increases up to max. $\Delta T=40^{\circ}\text{C}$. (Ta=20°C).
- Operating temperature : -40°C to 105 °C.

Product identification :

SMT DR0804 - 470 M

(1) (2) (3) (4)

- (1) Type : **Surface Mountable Type** .
- (2) Style : **DR** Core **OD**=8.5mm **H**=4.0mm .
- (3) Inductance : **470** for **47** uH.
- (4) Inductance tolerance : **K** : $\pm 10\%$; **M** : $\pm 20\%$.

Test equipments :

- Inductance measured at 0Adc on HP 4284A LCR meter or equivalent.
- DCR measured on Chroma 16502 micro-ohmmeter or equivalent.
- Electrical specifications at 25°C.



I SMTDR0402 series

Part No.	Inductance L (μ H)	DCR (Ω) Max.	SRF Ref. (MHz)	I sat (A) Max.	I rms (A) Max.
SMTDR0402 -1R0M	1.0	0.05	130	2.9	2.9
SMTDR0402 -1R5M	1.5	0.05	115	2.6	2.8
SMTDR0402 -2R2M	2.2	0.07	90	2.3	2.4
SMTDR0402 -3R3M	3.3	0.08	70	2.0	2.0
SMTDR0402 -4R7M	4.7	0.09	50	1.5	1.5
SMTDR0402 -6R8M	6.8	0.13	45	1.2	1.4
SMTDR0402 -100M	10	0.16	35	1.1	1.1
SMTDR0402 -150M	15	0.23	30	0.90	1.2
SMTDR0402 -220K	22	0.37	20	0.70	0.80
SMTDR0402 -330K	33	0.51	15	0.58	0.60
SMTDR0402 -470K	47	0.64	14	0.50	0.50
SMTDR0402 -680K	68	0.86	11	0.40	0.40
SMTDR0402 -101K	100	1.27	9.0	0.31	0.30
SMTDR0402 -151K	150	2.00	6.0	0.27	0.25
SMTDR0402 -221K	220	3.11	5.5	0.22	0.20
SMTDR0402 -331K	330	3.80	5.0	0.18	0.16
SMTDR0402 -471K	470	6.20	4.0	0.16	0.15
SMTDR0402 -681K	680	9.20	3.0	0.14	0.12
SMTDR0402 -102K	1000	13.8	2.0	0.10	0.07

I SMTDR0802 series

Part No.	Inductance L (μ H)	DCR (Ω) Max.	SRF Ref. (MHz)	I sat (A) Max.	I rms (A) Max.
SMTDR0802 -100M	10	0.11	35	2.4	2.0
SMTDR0802 -150M	15	0.15	33	2.0	1.5
SMTDR0802 -220M	22	0.23	25	1.6	1.3
SMTDR0802 -330M	33	0.30	19	1.4	1.1
SMTDR0802 -470M	47	0.39	14	1.0	0.80
SMTDR0802 -680M	68	0.66	12	0.90	0.70
SMTDR0802 -101M	100	0.84	10	0.70	0.60
SMTDR0802 -151M	150	1.2	8.0	0.60	0.50
SMTDR0802 -221M	220	1.9	6.0	0.50	0.40
SMTDR0802 -331M	330	2.7	5.0	0.40	0.30
SMTDR0802 -471M	470	4.0	4.0	0.30	0.20
SMTDR0802 -681M	680	5.3	3.0	0.20	0.10
SMTDR0802 -102M	1000	8.4	2.5	0.10	0.05



I SMTDR0804 series

Part No.	Inductance L (μ H)	DCR (Ω) Max.	SRF Ref. (MHz)	I sat (A) Max.	I rms (A) Max.
SMTDR0804 -1R0M	1.0	0.009	100	9.0	6.8
SMTDR0804 -1R5M	1.5	0.010	90	8.0	6.4
SMTDR0804 -2R2M	2.2	0.012	80	7.0	6.1
SMTDR0804 -3R3M	3.3	0.015	65	6.4	5.4
SMTDR0804 -4R7M	4.7	0.018	45	5.4	4.8
SMTDR0804 -6R8M	6.8	0.027	38	4.6	4.4
SMTDR0804 -100M	10	0.038	30	3.8	3.9
SMTDR0804 -150M	15	0.046	27	3.0	3.1
SMTDR0804 -220M	22	0.085	19	2.6	2.7
SMTDR0804 -330M	33	0.100	15	2.0	2.1
SMTDR0804 -470M	47	0.14	12	1.6	1.8
SMTDR0804 -680M	68	0.20	10	1.4	1.5
SMTDR0804 -101M	100	0.28	9.0	1.2	1.3
SMTDR0804 -501M	150	0.40	6.0	1.0	1.0
SMTDR0804 -221M	220	0.61	5.0	0.80	0.80
SMTDR0804 -331M	330	1.02	4.5	0.60	0.60
SMTDR0804 -471M	470	1.27	3.5	0.50	0.50
SMTDR0804 -681M	680	2.02	2.5	0.40	0.40
SMTDR0804 -102M	1000	3.00	2.0	0.30	0.30

I SMTDR0810 series

Part No.	Inductance L (μ H)	DCR (Ω) Max.	SRF Ref. (MHz)	I sat (A) Max.	I rms (A) Max.
SMTDR0810 -100M	10	0.04	22	8.0	3.5
SMTDR0810 -150M	15	0.05	18	7.0	3.0
SMTDR0810 -220M	22	0.066	11	5.5	2.5
SMTDR0810 -330M	33	0.08	9.0	4.0	2.0
SMTDR0810 -470M	47	0.11	8.0	3.8	1.6
SMTDR0810 -680M	68	0.17	7.0	3.0	1.2
SMTDR0810 -101M	100	0.22	5.0	2.5	1.2
SMTDR0810 -151M	150	0.34	4.0	2.0	0.90
SMTDR0810 -221M	220	0.44	3.5	1.6	0.70
SMTDR0810 -331M	330	0.70	2.5	1.2	0.60
SMTDR0810 -471M	470	0.95	2.0	1.0	0.30
SMTDR0810 -681M	680	1.2	2.0	1.0	0.20
SMTDR0810 -102M	1000	2.0	1.5	0.80	0.10



I SMTDR1206 series

Part No.	Inductance L (μ H)	DCR (Ω) Max.	SRF Ref. (MHz)	I sat (A) Max.	I rms (A) Max.
SMTDR1206 -1R0M	1.0	0.009	80	20	8.6
SMTDR1206 -2R2M	2.2	0.014	80	16	7.1
SMTDR1206 -3R3M	3.3	0.018	60	14	6.2
SMTDR1206 -5R6M	5.6	0.020	40	12	5.3
SMTDR1206 -100M	10	0.031	30	10	4.3
SMTDR1206 -150M	15	0.036	22	8.0	4.0
SMTDR1206 -220M	22	0.047	20	7.0	3.5
SMTDR1206 -330M	33	0.066	15	5.5	3.0
SMTDR1206 -470M	47	0.086	9.0	4.5	2.6
SMTDR1206 -680M	68	0.13	8.0	3.5	2.3
SMTDR1206-101M	100	0.19	7.0	3.0	1.8
SMTDR1206 -151M	150	0.25	6.0	2.6	1.5
SMTDR1206 -221M	220	0.38	5.0	2.4	1.2
SMTDR1206 -331M	330	0.56	4.0	1.9	1.0
SMTDR1206 -471M	470	0.85	3.0	1.4	0.82
SMTDR1206 -681M	680	1.1	2.5	1.2	0.72
SMTDR1206 -102M	1000	1.8	2.0	1.0	0.56

* Due to the limited space, the catalogue shows the typical specifications only. For more specific details (characteristics graph, reliability, and others), kindly invite you to access 3L official website www.3lcoil.com for better known.