



SMTDR SERIES

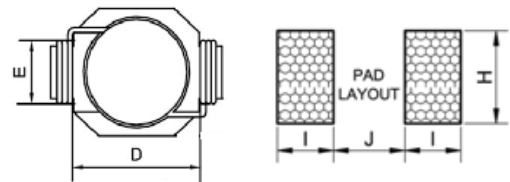
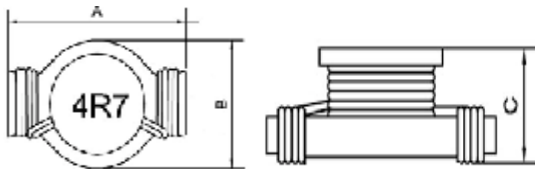
UNSHIELDED SMT POWER INDUCTORS

Applications :

- Personal computers.
- DC/DC converters, etc.
- LCD televisions.
- Power supply for VTRs.
- Other various electronic appliances.



Shape and Dimensions (Dimensions are in mm) :



Item	A Max.	B Max.	C Max.
SMTDR0402HC	7.5	5.2	3.2
SMTDR0504HC	9.0	6.1	5.0
SMTDR0904HC	13.2	9.9	6.0
SMTDR1105HC	19.4	13.3	6.8
SMTDR1306HC	22.5	15.3	8.0

Item	D	E	H	I	J
SMTDR0402HC	4.6	2.5	4.0	2.0	4.0
SMTDR0504HC	5.8	3.0	5.0	2.0	5.0
SMTDR0904HC	9.5	4.5	6.5	2.3	9.0
SMTDR1105HC	12.7	6.6	8.0	3.8	11.7
SMTDR1306HC	14.6	7.7	10.0	4.3	13.5

Features :

- Miniature surface mount designed.
- High power , High saturation inductors.
- Very low resistance .
- Maximum power density.
- Ideal inductors for DC-DC conversion .
- Meets UL 94V-0 flammability standard .
- Available on tape and reel for auto surface mounting.

Characteristics :

- Saturation Current (Isat): The current when the inductance becomes 30% (0402HC is 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 temp. : -30°C to 105°C

Product identification :

SMT DR1105 HC - 4R7 M

(1) (2) (3) (4) (5)

(1) Type : **Surface Mountable Type**.

(2) Style : **DR** Core : **OD=11.0mm HT=5.0mm**.

(3) HC : **High Current**.

(4) Inductance : **4R7** for **4.7 uH**.

(5) Inductance tolerance : **M** : $\pm 20\%$. **N** : $+40\% -20\%$.

Test equipments :

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



I SMTDR series

Part No.	Inductance L (μ H)	DCR Max. (m Ω)	I rms (A)	I sat (A)
		DR0402HC	DR0402HC	DR0402HC
R47N	0.47	25	6.0	3.7
1R0M	1.0	50	2.9	2.9
1R5M	1.5	50	2.8	2.6
2R2M	2.2	70	2.4	2.3
3R3M	3.3	80	2.0	2.0
4R7M	4.7	90	1.5	1.5
6R8M	6.8	130	1.4	1.2
100M	10	160	1.1	1.1
150M	15	230	1.0	0.9
220M	22	370	0.8	0.7

Part No.	L	0504HC	0904HC	0504HC	0904HC	0504HC	0904HC
R47N	0.47	10.0	5	6.0	10.6	7.7	11.4
1R0N	1.0	18	7	4.4	9.3	5.3	9.9
1R5N	1.5	20	9	4.2	8.3	4.5	7.9
2R2M	2.2	37	11	3.1	7.2	3.5	6.1
3R3M	3.3	43	13	2.9	6.5	3.0	5.1
4R7M	4.7	55	17	2.2	5.5	2.6	4.2
6R8M	6.8	90	21	1.7	5.0	2.2	3.6
100M	10	111	28	1.5	4.3	1.9	3.3
150M	15	175	41	1.2	3.5	1.5	2.4
220M	22	255	62	1.0	2.8	1.2	2.0
330M	33	367	92	0.82	2.1	0.99	1.7
470M	47	474	139	0.72	1.7	0.87	1.4
680M	68	750	179	0.58	1.5	0.67	1.2
101M	100	1110	271	0.47	1.2	0.53	0.95

Part No.	L	1105HC	1306HC	1105HC	1306HC	1105HC	1306HC
R47N	0.47	3.0	2	16.0	19.2	25.1	51.7
1R0N	1.0	4.0	3	12.5	17.3	15.3	37.8
1R5N	1.5	6.0	4	10.0	13.4	12.0	28.9
2R2M	2.2	8.0	5	9.2	12.0	10.2	23.7
3R3M	3.3	9.0	6	8.0	11.0	9.3	20.2
4R7M	4.7	12	10	6.5	8.6	7.7	15.6
6R8M	6.8	19	15	5.8	8.3	6.2	14.1
100M	10	27	20	4.3	6.8	5.2	11.5
150M	15	32	30	3.9	5.5	4.3	9.1
220M	22	50	40	3.1	4.5	3.7	7.6
330M	33	69	60	2.4	3.7	3.0	6.1
470M	47	109	74	1.9	3.1	2.4	5.2
680M	68	156	120	1.6	2.4	2.0	4.3
101M	100	206	170	1.4	2.0	1.8	3.6

* 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.