



**THE DATASHEET OF
CDRH127/LD-102MC**



SPECIFICATION

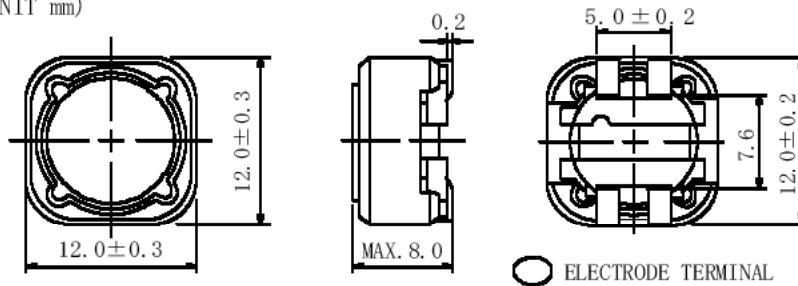
TYPE CDRH127/LD

1. SCOPE

REF. TO S-074-1510.

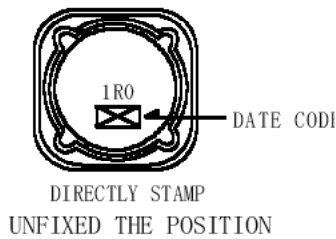
2. CONSTRUCTION

2-1. DIMENSION (UNIT mm)

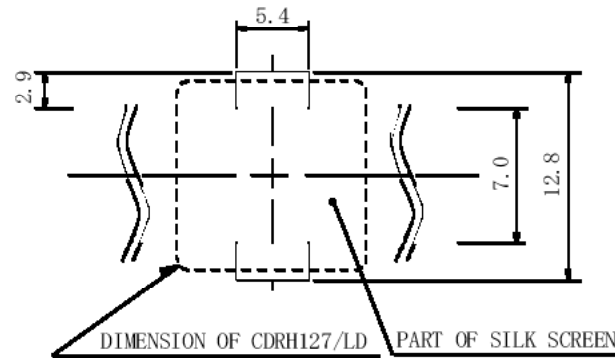


* DIMENSIONS WITHOUT TOLERANCE ARE APPROX.

2-2. STAMP (Ex.)



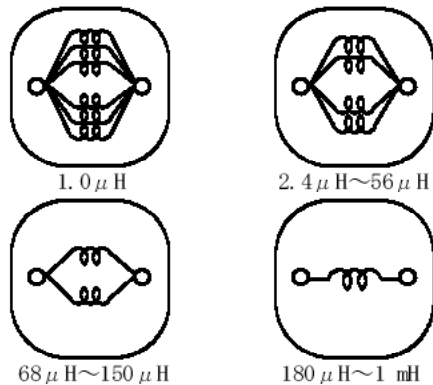
2-3. DIMENSION RECOMMENDED (mm)



PLEASE COAT WITH SILK SCREEN AMONG THE FOUR ELECTRODES.

3. COIL SPECIFICATION

3-1. CONNECTION (BOTTOM)



9 t h , M a y , 2 0 0 2			PART NAME	REF. TO THE ATTACHED SHEET.	
CHK.	CHK.	DRG.	SUMIDA CODE	4 7 8 5	
CHEN WEIMING	HE SHIYING	WANG WEILING F	SAMPLE NO.	4 7 8 5 - T 0 0 5	
			FIRST ISSUE		
			SPEC. NO.		S - 0 7 4 - 6 1 4 5 2 / 5

SPECIFICATION

TYPE
CDRH127/LD

3-2. ELECTRICAL CHARACTERISTICS I (IN THE CASE OF REEL)

NO.	PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D. C. R. (Ω) [MAX.] (at 20°C) ※2	RATED CURRENT (A) ※3	SUMIDA CODE
01	CDRH127/LD-1R0NC	1R0	1.0 μ H \pm 30%	6.5m (5.0m)	14.0	4785-0005
02	CDRH127/LD-2R4NC	2R4	2.4 μ H \pm 30%	10.5m (8.1m)	10.3	4785-0006
03	CDRH127/LD-3R5NC	3R5	3.5 μ H \pm 30%	12.4m (9.5m)	9.30	4785-0007
04	CDRH127/LD-4R6NC	4R6	4.6 μ H \pm 30%	13.8m (10.6m)	9.10	4785-0008
05	CDRH127/LD-5R8NC	5R8	5.8 μ H \pm 30%	16.2m (12.4m)	8.60	4785-0009
06	CDRH127/LD-7R4NC	7R4	7.4 μ H \pm 30%	17.7m (13.6m)	7.40	4785-0010
07	CDRH127/LD-100MC	100	10 μ H \pm 20%	19.5m (15.0m)	6.70	4785-0011
08	CDRH127/LD-120MC	120	12 μ H \pm 20%	21.3m (16.4m)	6.45	4785-0012
09	CDRH127/LD-150MC	150	15 μ H \pm 20%	26.4m (20.3m)	5.65	4785-0013
10	CDRH127/LD-180MC	180	18 μ H \pm 20%	28.0m (21.5m)	5.10	4785-0014
11	CDRH127/LD-220MC	220	22 μ H \pm 20%	36.4m (28.0m)	4.70	4785-0015
12	CDRH127/LD-270MC	270	27 μ H \pm 20%	41.6m (32.0m)	4.20	4785-0116
13	CDRH127/LD-330MC	330	33 μ H \pm 20%	53.3m (41.0m)	3.90	4785-0017
14	CDRH127/LD-390MC	390	39 μ H \pm 20%	60.5m (46.5m)	3.50	4785-0018
15	CDRH127/LD-470MC	470	47 μ H \pm 20%	78.0m (60.0m)	3.25	4785-0019
16	CDRH127/LD-560MC	560	56 μ H \pm 20%	90.0m (69.0m)	2.90	4785-0020
17	CDRH127/LD-680MC	680	68 μ H \pm 20%	120m (92.0m)	2.60	4785-0021
18	CDRH127/LD-820MC	820	82 μ H \pm 20%	119m (91.0m)	2.40	4785-0022
19	CDRH127/LD-101MC	101	100 μ H \pm 20%	151m (119m)	2.10	4785-0023
20	CDRH127/LD-121MC	121	120 μ H \pm 20%	169m (130m)	1.90	4785-0024
21	CDRH127/LD-151MC	151	150 μ H \pm 20%	227m (174m)	1.80	4785-0025
22	CDRH127/LD-181MC	181	180 μ H \pm 20%	299m (230m)	1.55	4785-0026
23	CDRH127/LD-221MC	221	220 μ H \pm 20%	338m (260m)	1.45	4785-0027
24	CDRH127/LD-271MC	271	270 μ H \pm 20%	419m (322m)	1.30	4785-0028
25	CDRH127/LD-331MC	331	330 μ H \pm 20%	471m (362m)	1.20	4785-0029
26	CDRH127/LD-391MC	391	390 μ H \pm 20%	572m (440m)	1.10	4785-0030
27	CDRH127/LD-471MC	471	470 μ H \pm 20%	741m (570m)	1.00	4785-0031
28	CDRH127/LD-561MC	561	560 μ H \pm 20%	852m (655m)	0.95	4785-0032
29	CDRH127/LD-681MC	681	680 μ H \pm 20%	1.13 (870m)	0.85	4785-0033
30	CDRH127/LD-821MC	821	820 μ H \pm 20%	1.24 (950m)	0.75	4785-0034
31	CDRH127/LD-102MC	102	1.0 mH \pm 20%	1.50 (1.15)	0.70	4785-0035

NOTE :	SPEC. NO. S-074-6145 3/5
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SPECIFICATION

TYPE
CDRH127/LD

3-3. ELECTRICAL CHARACTERISTICS II (IN THE CASE OF BOX)

NO.	PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D. C. R. (Ω) [MAX.] (at 20°C) ※2	RATED CURRENT (A) ※3	SUMIDA CODE
32	CDRH127/LD-1R0NB	1R0	1.0 μH ± 30%	6.5m(5.0m)	14.0	4785-0036
33	CDRH127/LD-2R4NB	2R4	2.4 μH ± 30%	10.5m(8.1m)	10.3	4785-0037
34	CDRH127/LD-3R5NB	3R5	3.5 μH ± 30%	12.4m(9.5m)	9.30	4785-0038
35	CDRH127/LD-4R6NB	4R6	4.6 μH ± 30%	13.8m(10.6m)	9.10	4785-0039
36	CDRH127/LD-5R8NB	5R8	5.8 μH ± 30%	16.2m(12.4m)	8.60	4785-0040
37	CDRH127/LD-7R4NB	7R4	7.4 μH ± 30%	17.7m(13.6m)	7.40	4785-0041
38	CDRH127/LD-100MB	100	10 μH ± 20%	19.5m(15.0m)	6.70	4785-0042
39	CDRH127/LD-120MB	120	12 μH ± 20%	21.3m(16.4m)	6.45	4785-0043
40	CDRH127/LD-150MB	150	15 μH ± 20%	26.4m(20.3m)	5.65	4785-0044
41	CDRH127/LD-180MB	180	18 μH ± 20%	28.0m(21.5m)	5.10	4785-0045
42	CDRH127/LD-220MB	220	22 μH ± 20%	36.4m(28.0m)	4.70	4785-0046
43	CDRH127/LD-270MB	270	27 μH ± 20%	41.6m(32.0m)	4.20	4785-0047
44	CDRH127/LD-330MB	330	33 μH ± 20%	53.3m(41.0m)	3.90	4785-0048
45	CDRH127/LD-390MB	390	39 μH ± 20%	60.5m(46.5m)	3.50	4785-0049
46	CDRH127/LD-470MB	470	47 μH ± 20%	78.0m(60.0m)	3.25	4785-0050
47	CDRH127/LD-560MB	560	56 μH ± 20%	90.0m(69.0m)	2.90	4785-0051
48	CDRH127/LD-680MB	680	68 μH ± 20%	120m(92.0m)	2.60	4785-0052
49	CDRH127/LD-820MB	820	82 μH ± 20%	119m(91.0m)	2.40	4785-0053
50	CDRH127/LD-101MB	101	100 μH ± 20%	151m(119m)	2.10	4785-0054
51	CDRH127/LD-121MB	121	120 μH ± 20%	169m(130m)	1.90	4785-0055
52	CDRH127/LD-151MB	151	150 μH ± 20%	227m(174m)	1.80	4785-0056
53	CDRH127/LD-181MB	181	180 μH ± 20%	299m(230m)	1.55	4785-0057
54	CDRH127/LD-221MB	221	220 μH ± 20%	338m(260m)	1.45	4785-0058
55	CDRH127/LD-271MB	271	270 μH ± 20%	419m(322m)	1.30	4785-0059
56	CDRH127/LD-331MB	331	330 μH ± 20%	471m(362m)	1.20	4785-0060
57	CDRH127/LD-391MB	391	390 μH ± 20%	572m(440m)	1.10	4785-0061
58	CDRH127/LD-471MB	471	470 μH ± 20%	741m(570m)	1.00	4785-0062
59	CDRH127/LD-561MB	561	560 μH ± 20%	852m(655m)	0.95	4785-0063
60	CDRH127/LD-681MB	681	680 μH ± 20%	1.13(870m)	0.85	4785-0064
61	CDRH127/LD-821MB	821	820 μH ± 20%	1.24(950m)	0.75	4785-0065
62	CDRH127/LD-102MB	102	1.0 mH ± 20%	1.50(1.15)	0.70	4785-0066

※1 MEASURING FREQUENCY 1.0 μH ~ 7.4 μH ; at 100 kHz
10 μH ~ 1 mH ; at 1 kHz

※2 () TYPICAL VALUE.

※3 THIS INDICATES THE VALUE OF CURRENT WHEN THE INDUCTANCE IS -25% MORE THAN IT'S NOMINAL VALUE AND TEMPERATURE RISING ΔT=40°C LOWER AT D. C. SUPERPOSITION. (Ta=20°C)

NOTE :	SPEC. NO. S-074-6145 4/5
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SPECIFICATION

TYPE CDRH127/LD

4. GENERAL CHARACTERISTICS

4-1. STORAGE TEMPERATURE RANGE : $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$

4-2. OPERATING TEMPERATURE RANGE: $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$ (INCLUDING SELF TEMPERATURE RISE)

4-3. EXTERNAL APPEARANCE : NO EXTERNAL DEFECTS CAN BE FOUND IN THE VISUAL INSPECTION.

4-4. ELECTRODE STRENGTH : NO TERMINAL DETACHMENT SHOULD BE FOUND WHEN THE DEVICE IS PUSHED IN TWO DIRECTIONS OF X AND Y WITH THE FORCE OF 5.0N FOR 10 ± 2 SECONDS AFTER SOLDERING BETWEEN COPPER PLATE AND THE ELECTRODES.
(REFER TO FIGURE AT RIGHT)



4-5. HEAT ENDURANCE TEST : REFER TO S-074-5002.

4-6. INSULATION RESISTANCE: VOLTAGE PROOF : THE INSULATION RESISTANCE SHOULD BE OVER $100\text{M}\Omega$ WHEN D.C. 100V IS APPLIED TO THE WINDING-CORE, MEANWHILE NO STRUCTURE AND ELECTRIC DEFECTS SHOULD BE FOUND FOR 1 MINUTE.

4-7. TEMPERATURE FEATURE : INDUCTANCE COEFFICIENT IS $(0 \sim 2000) \times 10^{-6} / ^{\circ}\text{C}$ ($-25^{\circ}\text{C} \sim +80^{\circ}\text{C}$)

4-8. HUMIDITY TEST : INDUCTANCE DEVIATION IS WITHIN $\pm 5.0\%$ AND NO STRUCTURE AND ELECTRIC DEFECTS CAN BE FOUND AFTER 96 ± 4 HOURS TEST UNDER THE CONDITION OF RELATIVE HUMIDITY OF $90 \sim 95\%$ AND TEMPERATURE OF $40 \pm 2^{\circ}\text{C}$, AND 1 HOUR STORAGE UNDER ROOM AMBIENT CONDITIONS AFTER THE DEVICE IS WIPED WITH DRY CLOTH.

4-9. VIBRATION TEST : INDUCTANCE DEVIATION IS WITHIN $\pm 3.0\%$ AFTER 1 HOUR SWEEPING VIBRATION IN EACH THREE DIRECTIONS, NAMELY, FORWARD AND BACKWARD, UP AND DOWN, RIGHT AND LEFT. THE FREQUENCY IS $10 \sim 55 \sim 10\text{Hz}$ AND THE AMPLITUDE OF 1 MINUTE CYCLE IS 1.5mm PP.

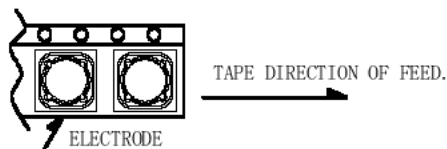
4-10. SHOCK TEST : INDUCTANCE DEVIATION IS WITHIN $\pm 3.0\%$ AFTER THE TEST WITH GUM-BLOCK SHOCK TESTING MACHINE, ONCE IN EACH OF THE THREE PERPENDICULAR AXIS DIRECTIONS. THE SHOCK ACCELERATION IS 981m/s^2 .

5. NOTE

- * PLEASE DO NOT USE A WASHING AGENT.
- * RECOMMENDATION: DUE TO THE COIL HEAVY WEIGHT. PLEASE APPLY BOND BETWEEN THIS COIL PART AND P. C. B. WHEN FIXED ONTO THE PCB.
- * RECOMMENDED REFLOW CONDITION TO BE ACCORDING TO S-074-5003.

6. PACKING

6-1. ENCLOSING CONDITION OF COILS.



6-2. IN THE CASE OF REEL: CARRIER TAPE PACKING SPECIFICATION IN DETAIL. (S-074-512)
IN THE CASE OF BOX: BOX PACKING AFTER CARRIER TAPE PACKING. (NO REEL)

NOTE :

SPEC. NO.

S - 0 7 4 - 6 1 4 5

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