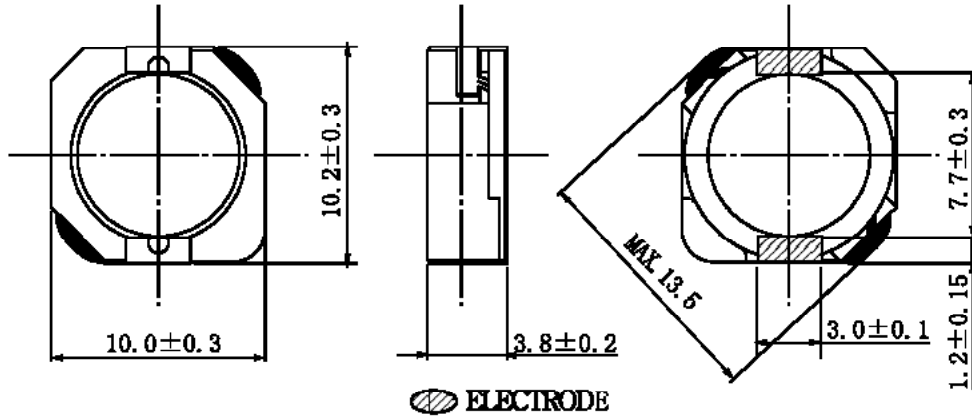


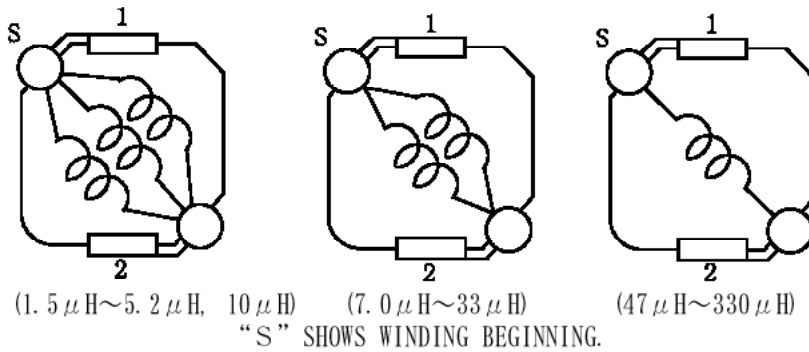
	SPECIFICATION	CUSTOMER:
	SUMIDA TYPE CDRH104R	PART NO. REF. TO THE ATTACHED SHEET

1. DIMENSION (UNIT mm)

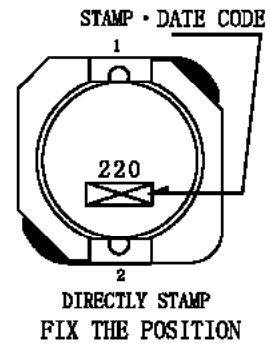


* DIMENSION WITHOUT TOLERANCE ARE APPROX.

2. CONNECTION (BOTTOM)

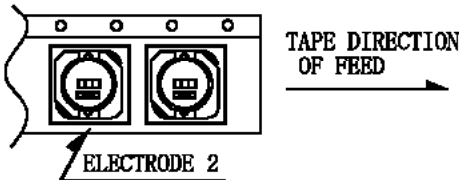


3. STAMP (EXP.)



4. NOTE

- * RECOMMENDED REFLOW CONDITIONS ARE BASED ON S-074-5003.
- * ENCLOSING CONDITION OF COILS. Δ



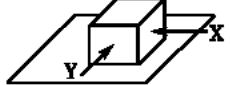
* CARRIER TAPE PACKING SPECIFICATION IN DETAIL. (S-074-5092)

4th, Sep., 1999			SUMIDA CODE	4768
CHK.	CHK.	DRG.	DRG. NO. 2/5	
CHEN WEIMING	HE GUOGAO	TIAN YONGXIANG YC	S-074-6082	

GENERAL CHARACTERISTICS

TYPE

CDRH104R

1. OPERATING TEMPERATURE RANGE: \triangle $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$ (CONTAIN GENERATE HEAT OF COIL)
 2. STORAGE TEMPERATURE RANGE : $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$
 3. EXTERNAL APPEARANCE : NO EXTERNAL DEFECTS CAN BE FOUND IN THE VISUAL INSPECTION.
 4. TLECTRODE STRENGTH : NO TLECTRODE DETACHMENT SHOULD BE FOUND WHEN THE DEVICE IS PUSHED IN TWO DIRECTIONS OF X AND Y WITH THE FORCE OF 5.0N FOR 10 ± 5 SECONDS AFTER SOLDERING BETWEEN COPPER PLATE AND THE TLECTRODES.
(REFER TO FIGURE AT RIGHT)
- 
5. HEAT ENDURANCE TEST : REFER TO S-074-5002.
 6. TEMPERATURE FEATURE : INDUCTANCE COEFFICIENT IS $(0 \sim 2000) \times 10^{-6}/^{\circ}\text{C}$ ($-40 \sim +100^{\circ}\text{C}$)
 7. HUMIDITY TEST : INDUCTANCE DEVIATION IS WITHIN $\pm 5.0\%$ AND NO STRUCTURE AND ELECTRIC DEFECTS CAN BE FOUND AFTER 96 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.
 8. VIBRATION TEST : INDUCTANCE DEVIATION IS WITHIN $\pm 2.0\%$ 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.
 9. SHOCK TEST : INDUCTANCE DEVIATION IS WITHIN $\pm 2.0\%$ AFTER THE TEST WITH GOM-BLOCK SHOCK TESTING MACHINE, ONCE IN EACH OF THE THREE PERPENDICULAR AXIS DIRECTIONS. THE SHOCK ACCELERATION IS 981m/s^2 .
 10. SOLDER ABILITY : ELECTRODES ARE IMMERSSED IN ROSIN (JIS-K-5902) WITH METHANOL (JIS-K-1501) (25%) FOR 5 SECONDS. THEN DIPPED IN $230 \pm 5^{\circ}\text{C}$ MOLTEN SOLDER (JIS-Z- 3282 H63A) FOR 2 ± 0.5 SECONDS. 95% OF THE AREAS OF THE IMMERSSED ELECTRODES SHOULD BE COVERD BY SOLDER COATING.
 11. HIGH TEMPERATURE LOAD LIFE TEST : INDUCTANCE DEVIATION IS WITHIN $\pm 3.0\%$ AND NO STRUCTURE AND ELECTRIC DEFECTS CAN BE FOUND AFTER 500 ± 12 HOURS TEST UNDER THE CONDITION OF TEMPERATURE OF $100 \pm 2^{\circ}\text{C}$ AND RATED CURRENT LOADED AND 1 HOUR STORAGE UNDER ROOM AMBIENT CONDITIONS AFTER WHICH DEVICE IS TESTED WITHIN THE NEXT 2 HOURS.
 12. LOW TEMPERATURE LOAD LIFE TEST : INDUCTANCE DEVIATION IS WITHIN $\pm 3.0\%$ AND NO STRUCTURE AND ELECTRIC DEFECTS CAN BE FOUND AFTER 500 ± 12 HOURS TEST UNDER THE CONDITION OF TEMPERATURE OF $-40 \pm 3^{\circ}\text{C}$ AND RATED CURRENT LOADED AND 1 HOUR STORAGE UNDER ROOM AMBIENT CONDITIONS AFTER WHICH DEVICE IS TESTED WITHIN THE NEXT 2 HOURS.

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CHK.	CHK.	DRG.
CHEN WEIMING	HE GUOGAO	TIAN YONGXIANG YC

DRG. NO.

3 / 5

S-074-6082

SPECIFICATION

TYPE

CDRH104R

ELECTRICAL CHARACTERISTICS

NO.	PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D. C. R. (Ω) [MAX.] (TYP.) (at 20°C) ※2	RATED CURRENT (A) ※5		SUMIDA CODE
					※3	※4	
1	CDRH104R-1R5NC	1R5	1.5 μH ± 30%	8.1m (6.0m)	10.0	6.50	-0031
2	CDRH104R-2R5NC	2R5	2.5 μH ± 30%	10.5m (7.8m)	7.50	6.10	-0018
3	CDRH104R-3R8NC	3R8	3.8 μH ± 30%	13.0m (9.6m)	6.00	5.50	-0019
4	CDRH104R-5R2NC	5R2	5.2 μH ± 30%	22m (16m)	5.50	5.40	-0020
5	CDRH104R-7R0NC	7R0	7.0 μH ± 30%	27m (20m)	4.80	4.50	-0021
6	CDRH104R-100NC	100	10 μH ± 30%	35m (26m)	4.40	3.80	-0022
7	CDRH104R-150NC	150	15 μH ± 30%	50m (37m)	3.60	3.10	-0023
8	CDRH104R-220NC	220	22 μH ± 30%	73m (54m)	2.90	2.50	-0024
9	CDRH104R-330NC	330	33 μH ± 30%	93m (69m)	2.30	2.20	-0025
10	CDRH104R-470NC	470	47 μH ± 30%	128m (95m)	2.10	1.90	-0026
11	CDRH104R-680NC	680	68 μH ± 30%	213m (158m)	1.50	1.42	-0027
12	CDRH104R-101NC	101	100 μH ± 30%	304m (225m)	1.35	1.25	-0028
13	CDRH104R-151NC	151	150 μH ± 30%	506m (375m)	1.15	0.85	-0017
14	CDRH104R-221NC	221	220 μH ± 30%	756m (560m)	0.92	0.70	-0029
15	CDRH104R-331NC	331	330 μH ± 30%	1.09 (810m)	0.70	0.52	-0030

※1 MEASURING FREQUENCY at 100kHz 1V

※2 () TYPICAL VALUE.

※3 THE CURRENT WHEN THE INDUCTANCE DECREASES TO 65% OF INITIAL VALUE.

※4 THE CURRENT WHEN THE TEMPERATURE OF COIL IS INCREASED BY 30°C.

※5 THE RATED CURRENT INDICATES THE CURRENT WHEN THE INDUCTANCE DECREASES TO 65% OF INITIAL VALUE OR DC CURRENT WHEN THE TEMPERATURE OF COIL IS INCREASED BY 30°C. THE SMALLER ONE IS DEFINED AS RATED CURRENT.

4th, Sep., 1999

CHK.	CHK.	DRG.
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DRG. NO. 4/5

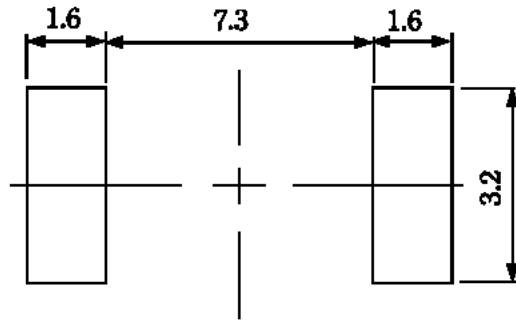
S-074-6082

SPECIFICATION

TYPE

CDRH104R

DIMENSION RECOMMENDED (mm)



4th, Sep., 1999

CHK.	CHK.	DRG.
CHEN WEIMING	HE GUOGAO	TIAN YONGXIANG YC

DRG. NO.

5/5

S-074-6082