SUMIDA TYPE
CDEP105

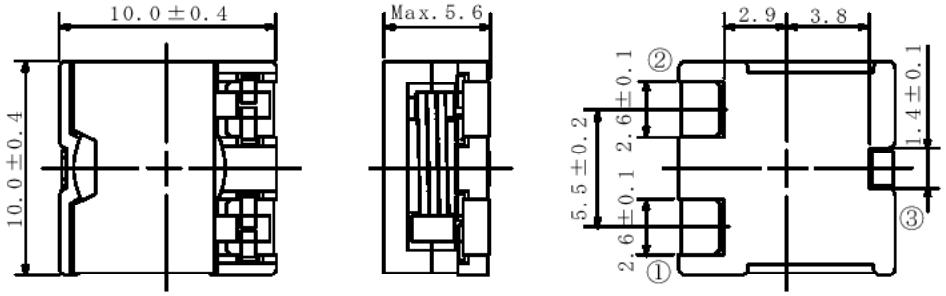
SPECIFICATION

1. SCOPE

REF. TO S-074-1510.

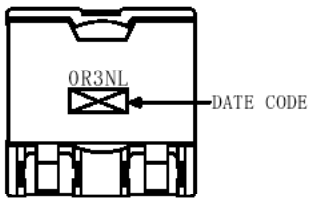
2. CONSTRUCTION

2-1. DIMENSION (UNIT mm)

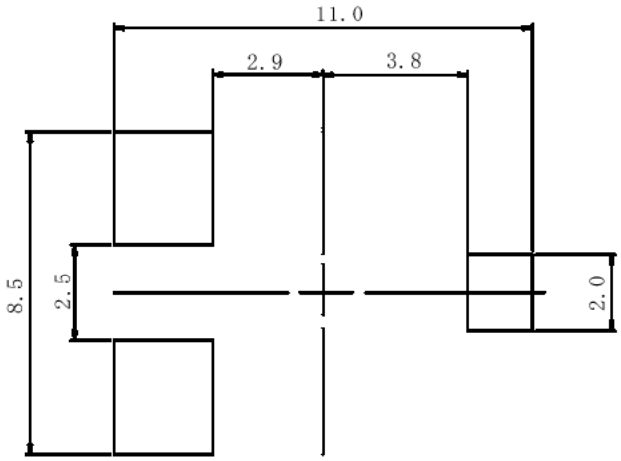


＊ DIMENSIONS WITHOUT TOLERANCE ARE APPROX.

2-2. STAMP (Ex.)

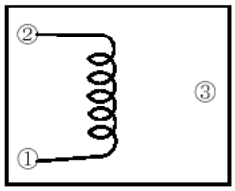


2-3. DIMENSION RECOMMENDED (mm)



3. COIL SPECIFICATION

3-1. CONNECTION (BOTTOM)



15th, Aug., 2001			PART NAME	REF. TO(ITEM.3-2)	
CHK.	CHK.	DRG.	SUMIDA CODE	4779	
CHEN WEIMING	HE SHIYING	ZHONG ZIJIAN W	SAMPLE NO.	4779－T001	SPEC. NO. S－074－6123 2/5
			FIRST ISSUE		

SPECIFICATION

SUMIDA TYPE
CDEP105

3-2. ELECTRICAL CHARACTERISTICS

ELECTRICAL CHARACTERISTICS-LOW D.C.R. TYPE

NO.	PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D.C.R. (mΩ) [MAX.]※2 (at 20℃)	THE SATURATION CURRENT (A) ※3		TEMPERATURE RISE (A) ※4 △T=40℃	SUMIDA CODE
					(at 20℃)	(at100℃)		
01	CDEP1Ø5-ØR3NC-88	0R3NL	0.36μH±30%	1.7(1.4)	24.0	20.0	19.0	-0001
02	CDEP1Ø5-ØR8MC-88	0R8ML	0.8μH±20%	2.4(2.0)	16.0	13.2	17.7	-0002
03	CDEP1Ø5-1R4MC-88	1R4ML	1.4μH±20%	4.1(3.4)	12.0	10.0	13.0	-0003
04	CDEP1Ø5-2R2MC-88	2R2ML	2.2μH±20%	5.3(4.4)	9.6	8.0	11.2	-0004
05	CDEP1Ø5-3R2MC-88	3R2ML	3.2μH±20%	7.5(6.2)	7.8	6.6	9.0	-0005
06	CDEP1Ø5-4R3MC-88	4R3ML	4.3μH±20%	10.5(8.7)	6.8	5.7	7.8	-0006
07	CDEP1Ø5-5R7MC-88	5R7ML	5.7μH±20%	12.4(10.3)	5.8	4.9	7.4	-0007
08	CDEP1Ø5-7R2MC-88	7R2ML	7.2μH±20%	18.0(15.0)	5.3	4.2	6.2	-0008
09	CDEP1Ø5-8R8MC-88	8R8ML	8.8μH±20%	23.8(19.8)	4.8	4.0	4.9	-0009

ELECTRICAL CHARACTERISTICS-STANDARD TYPE

NO.	PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D.C.R. (mΩ) [MAX.]※2 (at 20℃)	THE SATURATION CURRENT (A) ※3		TEMPERATURE RISE (A) ※4 △T=40℃	SUMIDA CODE
					(at 20℃)	(at100℃)		
10	CDEP1Ø5-ØR2NC-5Ø	0R2NS	0.22μH±30%	1.7(1.4)	40.0	30.9	19.0	-0010
11	CDEP1Ø5-ØR4MC-5Ø	0R4MS	0.45μH±20%	2.4(2.0)	26.4	21.2	17.7	-0011
12	CDEP1Ø5-ØR8MC-5Ø	0R8MS	0.8μH±20%	4.1(3.4)	20.8	16.7	13.0	-0012
13	CDEP1Ø5-1R3MC-5Ø	1R3MS	1.3μH±20%	5.3(4.4)	16.8	13.4	11.2	-0013
14	CDEP1Ø5-1R8MC-5Ø	1R8MS	1.8μH±20%	7.5(6.2)	13.8	11.0	9.0	-0014
15	CDEP1Ø5-2R5MC-5Ø	2R5MS	2.5μH±20%	10.5(8.7)	11.8	9.6	7.8	-0015
16	CDEP1Ø5-3R2MC-5Ø	3R2MS	3.2μH±20%	12.4(10.3)	10.5	8.4	7.4	-0016
17	CDEP1Ø5-4RØMC-5Ø	4ROMS	4.0μH±20%	18.0(15.0)	9.3	7.4	6.2	-0017
18	CDEP1Ø5-5RØMC-5Ø	5ROMS	5.0μH±20%	23.8(19.8)	8.4	6.7	4.9	-0018

NOTE :

SPEC.NO.
S－074－6123

SPECIFICATION

SUMIDA TYPE
CDEP105

ELECTRICAL CHARACTERISTICS-HIGH POWER TYPE

NO.	PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D.C.R. (mΩ) [MAX.]※2 (at 20℃)	THE SATURATION CURRENT (A) ※3		TEMPERATURE RISE (A) ※4 △T=40℃	SUMIDA CODE
					(at 20℃)	(at100℃)		
19	CDEP1Ø5-ØR1NC-32	0R1NH	0.15μH±30%	1.7(1.4)	55.0	46.0	19.0	-0019
20	CDEP1Ø5-ØR3NC-32	0R3NH	0.3μH±30%	2.4(2.0)	40.0	33.0	17.7	-0020
21	CDEP1Ø5-ØR5MC-32	0R5MH	0.5μH±20%	4.1(3.4)	30.4	25.0	13.0	-0021
22	CDEP1Ø5-ØR8MC-32	0R8MH	0.8μH±20%	5.3(4.4)	25.2	20.7	11.2	-0022
23	CDEP1Ø5-1R2MC-32	1R2MH	1.2μH±20%	7.5(6.2)	21.0	17.4	9.0	-0023
24	CDEP1Ø5-1R5MC-32	1R5MH	1.5μH±20%	10.5(8.7)	18.0	15.0	7.8	-0024
25	CDEP1Ø5-2RØMC-32	2ROMH	2.0μH±20%	12.4(10.3)	15.8	13.1	7.4	-0025
26	CDEP1Ø5-2R5MC-32	2R5MH	2.5μH±20%	18.0(15.0)	14.0	11.7	6.2	-0026
27	CDEP1Ø5-3RØMC-32	3ROMH	3.0μH±20%	23.8(19.8)	12.6	10.5	4.9	-0027

※1 MEASURING FREQUENCY INDUCTANCE at 100kHz, 1V

※2 ( )TYPICAL VALUE.

※3 THE SATURATION CURRENT: THIS INDICATES THE VALUE OF D.C. CURRENT WHEN THE INDUCTANCE DECREASES TO 65% (WHILE THE TOLERANCE IS ±30%) OR 75% (WHILE THE TOLERANCE IS ±20%) OF IT'S NOMINAL

※4 THE TEMPERATURE RISE: THE VALUE OF D.C.CURRENT WHEN THE TEMPERATURE RISE IS △t=40℃ (Ta=20℃).

NOTE :

SPEC.NO.
S-074-6123

SPECIFICATION

SUMIDA TYPE
CDEP105

4. GENERAL CHARACTERISTICS

4-1. STORAGE TEMPERATURE RANGE : −40℃ ～+125℃

4-2. OPERATING TEMPERATURE RANGE: −40℃ ～+125℃ (INCLUDING SELF TEMPERATURE RISE)

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

4. FIXING 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±1 SECONDS AFTER SOLDERING BETWEEN COPPER PLATE AND THE TERMINALS. (REFER TO FIGURE AT RIGHT)

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

4-6. TEMPERATURE FEATURE : INDUCTANCE COEFFICIENT IS (0 ～ 2000)×10^{-6}/℃ (-40℃～+125℃)

4-7. HUMIDITY TEST : INDUCTANCE DEVIATION IS WITHIN ±10% AND NO STRUCTURE AND ELECTRIC DEFECTS CAN BE FOUND AFTER 96±4 HOURS TEST UNDER THE CONDITION OF RELATIVE HUMIDITY OF 90～95% AND TEMPERATURE OF 40℃±2℃, AND 1 HOUR STORAGE UNDER ROOM AMBIENT CONDITIONS AFTER THE DEVICE IS WIPED WITH DRY CLOTH.

4-8. VIBRATION TEST : INDUCTANCE DEVIATION IS WITHIN ±5.0% AFTER 1 HOUR SWEEPING VIBRATION IN EACH THREE DIRECTIONS, NAMELY, FORWARD AND BACKWARD, UP AND DOWN, RIGHT AND LEFT. THE FREQUENCY IS 10～55～10Hz AND THE AMPLITUDE OF 1 MINUTE CYCLE IS 1.5mm PP.

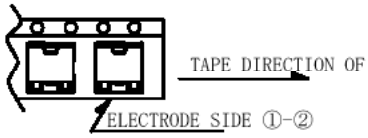
4-9. SHOCK TEST : INDUCTANCE DEVIATION IS WITHIN ±5.0% AFTER THE TEST WITH GUM-BLOCK SHOCK TESTING MACHINE, ONCE IN EACH OF THE THREE PERPENDICULAR AXIS DIRECTIONS. THE SHOCK ACCELERATION IS 981m/s^2.

5. NOTE

* PLEASE DO NOT USE A WASHING AGENT.
* PLEASE PUT THE SOLDER TO ALL TERMINAL WHENEVER YOU USE THIS COIL.
* RECOMMENDED REFLOW CONDITION TO BE ACCORDING TO S-074-5003.
* GENERAL STIPULATIONS FOR COIL USE REF. TO S-074-1510.
* PLEASE PAY ATTENTION TO THE SUITABILITY OF THE PATTERN FOR THE CURRENT IN DESIGN.
* PLEASE PAY ATTENTION TO SAFETY DISTANCE BETWEEN COIL PERIPHERY AND OTHER PARTS OR COPPER PATTERN, BECAUSE Mn-Zn SERIES FERRITE CORE IS USED IN THE PRODUCTS.

6. PACKING

6-1. ENCLOSING CONDITION OF COILS.



6-2. CARRIER TAPE PACKING SPECIFICATION IN DETAIL. (S-074-5143)

NOTE :	SPEC. NO. S－０７４－６１２３ 5/5