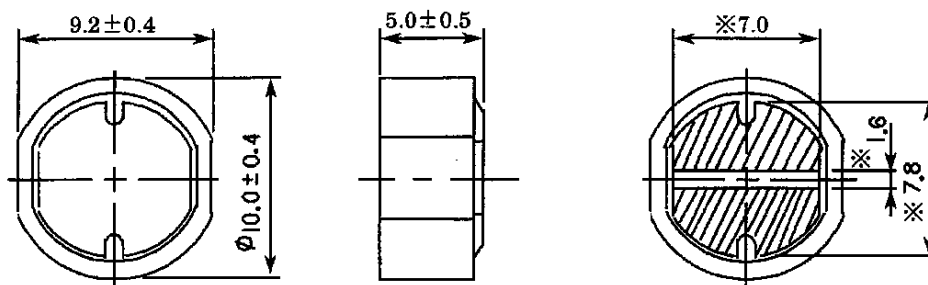


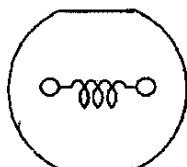
|  |                      |                                         |
|--|----------------------|-----------------------------------------|
|  | <b>SPECIFICATION</b> |                                         |
|  | SUMIDA TYPE CDR105   | PART NO. REF. TO IN THE ATTACHED SHEET. |

1. DIMENSION (UNIT mm)

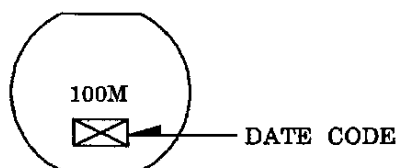


※ DIMENSION OF TERMINAL IS TYPICAL

2. CONNECTION (BOTTOM)



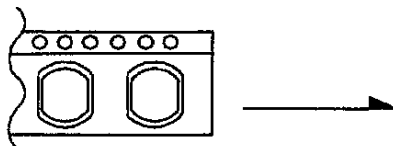
3. STAMP (Ex.)



DIRECTLY STAMP  
UNFIXED THE POSITION

4. NOTE

\*ENCLOSING CONDITION OF COILS.



\*CARRIER TAPE PACKING SPECIFICATION IN DETAIL.(S-074-404)

\*RECOMMENDATION

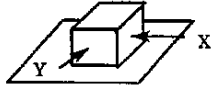
DUE TO THE COIL WEIGHT, PLEASE APPLY BOND ONTO THIS COIL PART  
WHEN FIXED ONTO THE PCB.

\*RECOMMENDED REFLOW CONDITION TO BE ACCORDING TO S-074-5003.

|                 |             |            |             |      |              |
|-----------------|-------------|------------|-------------|------|--------------|
| 3 rd SEP., 1993 |             |            | SUMIDA CODE | 4721 |              |
| CH K.           | CH K.       | DR G.      |             |      | DRG. NO. 2/5 |
| O.SATO          | KOMA<br>ITA | KIKYO<br>A |             |      | S-074-428    |

SUMIDA TECHNOLOGIES INCORPORATED

|                         |                |
|-------------------------|----------------|
| GENERAL CHARACTERISTICS | TYPE<br>CDR105 |
|-------------------------|----------------|

1. OPERATIONG TEMPERATURE : -25 ~ +70 °C (COIL CONTAIN HEAT)
2. EXTERNAL APPEARANCE : ON VISUAL INSPECTION, THE COIL HAS NO EXTERNAL DEFECTS.
3. TERMINAL STRENGTH : AFTER SOLDERING, BETWEEN COPPER PLATE AND TERMINAL OF COIL, PUSH IN THREE DIRECTIONS OF X, Y WITHSTANDING 15. ON (1.53kgf) FOR 10±2 SECONDS. TERMINAL SHOULD NOT PEEL OFF. (REFER TO FIGURE AT RIGHT)
 
4. HEAT ENDURANCE TEST: REFER TO S-074-5002
5. DIELECTRIC STRENGTH : NO APPARENT AT 100V D.C. FOR 1 MINUTE BETWEEN COIL-CORE.
6. INSULATING RESISTANCE : OVER 100 MΩ AT 100V D.C. BETWEEN COIL-CORE.
7. INDUCTANCE TEMPERATURE COEFFICIENT : ( 0 ~ 2000 ) × 10<sup>-6</sup>/°C ( -25 ~ + 70 °C )
8. HUMIDITY TEST : INDUCTANCE DEVIATION WITHIN ± 5.0 %  
AFTER 96 HOURS IN 90 ~ 95 % RELATIVE HUMIDITY AT 40 ± 2 °C AND 1 HOUR DRYING UNDER NORMAL CONDITION.
9. VIBRATION TEST : INDUCTANCE DEVIATION WITHIN ± 2.0 % AFTER VIBRATION FOR 2 HOUR. IN EACH OF THREE ORIENTATIONS AT SWEEP VIBRATION (10~55~10 Hz) WITH 1.5 mm P-P AMPLITUDE.
10. SHOCK TEST : INDUCTANCE DEVIATION WITHIN ± 2.0 % AFTER DROP DOWN WITH 981m/s<sup>2</sup>(100G) SHOCK ATTITUDE UPON A RUBBER BLOCK METHOD SHOCK TESTING MACHINE, FOR 1 TIME, IN EACH OF THREE ORIENTATIONS.

3 rd SEP., 1993

| CH K.  | CH K.       | DR G.      |
|--------|-------------|------------|
| O.SATO | KOMA<br>ITA | KIKYO<br>A |

|           |     |
|-----------|-----|
| DRG. NO.  | 3/5 |
| S-074-428 |     |

SUMIDA TECHNOLOGIES INCORPORATED

|               |                |
|---------------|----------------|
| SPECIFICATION | TYPE<br>CDR105 |
|---------------|----------------|

ELECTRICAL CHARACTERISTICS

| NO. | PART NO.     | STAMP | INDUCTANCE<br>[WITHIN]<br>×1                                     | D.C.R.<br>( $\Omega$ )<br>[MAX.]<br>(at 20°C) | RATED<br>CURRENT<br>(A)<br>×2 | S.R.F.<br>(MHz)<br>[TYP.] | SUMIDA<br>CODE |
|-----|--------------|-------|------------------------------------------------------------------|-----------------------------------------------|-------------------------------|---------------------------|----------------|
| 01  | CDR105-100MC | 100M  | 10 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ %  | 0.06                                          | 2.53                          | 31                        | 4721-0015      |
| 02  | CDR105-120MC | 120M  | 12 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ %  | 0.06                                          | 2.31                          | 27                        | 4721-0026      |
| 03  | CDR105-150MC | 150M  | 15 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ %  | 0.07                                          | 2.06                          | 27                        | 4721-0037      |
| 04  | CDR105-180MC | 180M  | 18 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ %  | 0.08                                          | 1.89                          | 26                        | 4721-0048      |
| 05  | CDR105-220MC | 220M  | 22 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ %  | 0.09                                          | 1.71                          | 21                        | 4721-0059      |
| 06  | CDR105-270MC | 270M  | 27 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ %  | 0.11                                          | 1.54                          | 18                        | 4721-0060      |
| 07  | CDR105-330MC | 330M  | 33 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ %  | 0.12                                          | 1.39                          | 16                        | 4721-0071      |
| 08  | CDR105-390MC | 390M  | 39 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ %  | 0.16                                          | 1.28                          | 15                        | 4721-0082      |
| 09  | CDR105-470MC | 470M  | 47 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ %  | 0.18                                          | 1.17                          | 14                        | 4721-0093      |
| 10  | CDR105-560MC | 560M  | 56 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ %  | 0.19                                          | 1.07                          | 12                        | 4721-0104      |
| 11  | CDR105-680MC | 680M  | 68 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ %  | 0.22                                          | 0.97                          | 11                        | 4721-0115      |
| 12  | CDR105-820MC | 820M  | 82 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ %  | 0.28                                          | 0.88                          | 10                        | 4721-0126      |
| 13  | CDR105-101MC | 101M  | 100 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ % | 0.35                                          | 0.80                          | 7                         | 4721-0137      |
| 14  | CDR105-121MC | 121M  | 120 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ % | 0.38                                          | 0.73                          | 6.5                       | 4721-0148      |
| 15  | CDR105-151MC | 151M  | 150 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ % | 0.45                                          | 0.65                          | 5.8                       | 4721-0159      |
| 16  | CDR105-181MC | 181M  | 180 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ % | 0.62                                          | 0.60                          | 5.3                       | 4721-0161      |
| 17  | CDR105-221MC | 221M  | 220 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ % | 0.69                                          | 0.54                          | 5.2                       | 4721-0172      |
| 18  | CDR105-271MC | 271M  | 270 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ % | 0.78                                          | 0.49                          | 4.6                       | 4721-0183      |
| 19  | CDR105-331MC | 331M  | 330 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ % | 1.03                                          | 0.44                          | 4.2                       | 4721-0194      |
| 20  | CDR105-391MC | 391M  | 390 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ % | 1.18                                          | 0.41                          | 3.6                       | 4721-0205      |
| 21  | CDR105-471MC | 471M  | 470 $\mu$ H $\begin{smallmatrix} +20 \\ -15 \end{smallmatrix}$ % | 1.60                                          | 0.37                          | 3.6                       | 4721-0216      |

※1: MEASURED FREQUENCY L 10  $\mu$ H ~ 82  $\mu$ H ; at 2.52 MHz  
100  $\mu$ H ~ 470  $\mu$ H ; at 1 kHz

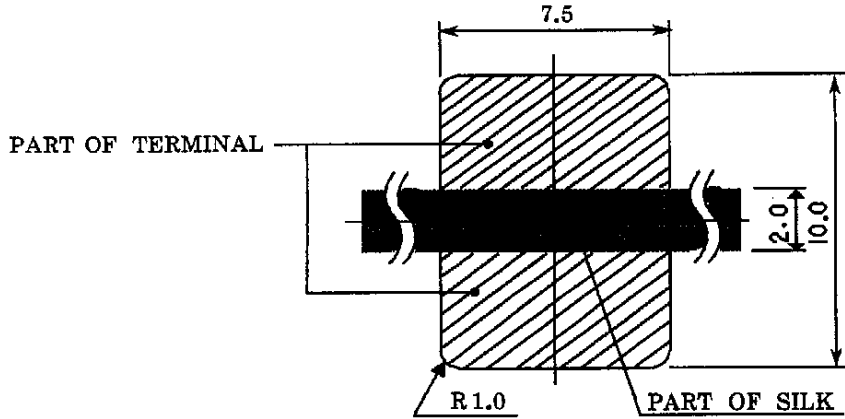
※2: UNDER D.C. PRE-MAGNETIZATION CHARACTERISTICS, IN TERMS OF RATED CURRENT, THE INDUCTANCE SHOULD NOT LESS THAN 80 % OF THE ORIGINAL VALUE, AND HEAT-UP, CHANGE OF TEMPERATURE SHOULD BE BELOW 40°C. (TEMPERATURE STANDARD ; Ta=20°C)

|                 |             |        |                              |      |
|-----------------|-------------|--------|------------------------------|------|
| 3 rd SEP., 1993 |             |        | SUMIDA CODE                  | 4721 |
| CH K.           | CH K.       | D R G. | DEG NO. 4/5<br><br>S-074-428 |      |
| O.SATO          | KOMA<br>ITA | KIKYO  |                              |      |
|                 |             | A      |                              |      |

SUMIDA TECHNOLOGIES INCORPORATED

|               |                |
|---------------|----------------|
| SPECIFICATION | TYPE<br>CDR105 |
|---------------|----------------|

DIMENSION RECOMMENDED (mm)



PLEASE COAT WITH SILK BETWEEN TERMINAL.

THICKNESS OF METALMASK RECOMMENDED 0.2t

3 rd SEP., 1993

| C H K. | C H K.      | D R G.     |
|--------|-------------|------------|
| O.SATO | KOMA<br>ITA | KIKYO<br>A |

|           |     |
|-----------|-----|
| DRG. NO.  | 5/5 |
| S-074-428 |     |

SUMIDA TECHNOLOGIES INCORPORATED