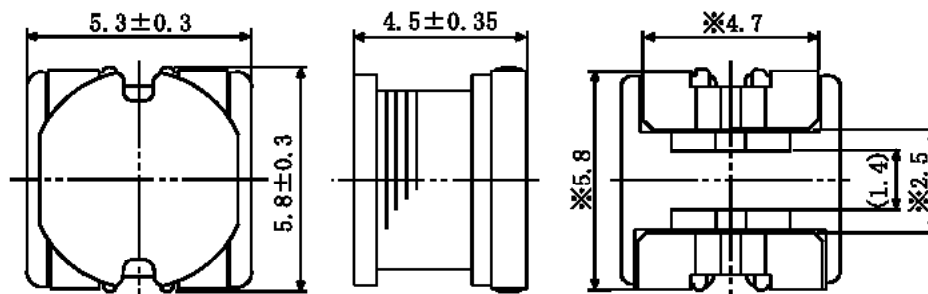


|  |                     |                                     |
|--|---------------------|-------------------------------------|
|  | SPECIFICATION       | CUSTOMER :                          |
|  | SUMIDA TYPE C R 5 4 | PART NO. REF. TO THE ATTACHED SHEET |

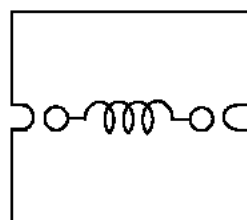
1. DIMENSION (UNIT mm)



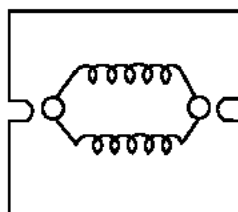
※ DIMENSION OF TERMINAL IS TYPICAL.

2. CONNECTION (BOTTOM)

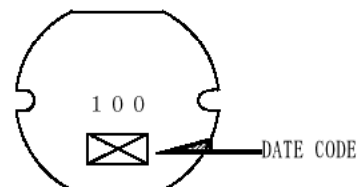
3. STAMP (Ex.)



100MC~221KC



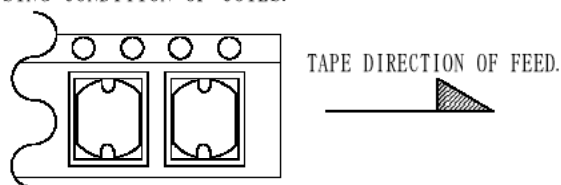
2R2MC~8R5MC



DIRECTLY STAMP  
UNFIXED THE POSITION

4. NOTE

\*ENCLOSING CONDITION OF COILS.



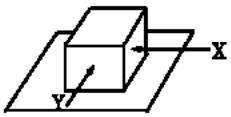
\* IN THE CASE OF BOX:BOX PACKING AFTER CARRIER TAPE PACKING. (NO REEL)   
IN THE CASE OF REEL:CARRIER TAPE PACKING SPECIFICATION IN DETAIL. (S-074-6006)  
\*RECOMMENDED REFLOW CONDITION TO BE ACCORDING TO S-074-5003.

|                  |      |           |             |      |                            |
|------------------|------|-----------|-------------|------|----------------------------|
| 19th, Feb., 1998 |      |           | SUMIDA CODE | 4751 |                            |
| CHK.             | CHK. | DRG.      |             |      |                            |
| SUNNY            | FENG | DENG<br>Y |             |      |                            |
|                  |      |           |             |      | DRG. NO. 2/8<br>S-074-6020 |

# GENERAL CHARACTERISTICS

TYPE

CR54

1. OPERATING TEMPERATURE RANGE  $-30 \sim +100^{\circ}\text{C}$  (INCLUDING HEAT PRODUCING FROM COIL.)
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 TWO DIRECTIONS OF X, Y WITHSTANDING 10N FOR  $10 \pm 2$  SECONDS. TERMINAL SHOULD NOT PEEL OFF. (REFER TO FIGURE AT RIGHT.)
 
4. HEAT ENDURANCE TEST REFER TO THE S-074-5002.
5. DIELECTRIC STRENGTH NO APPARENT AT 100V D.C. FOR 1 MINUTE BETWEEN COIL-CORE.
6. INSULATING RESISTANCE OVER  $100\text{M}\Omega$  AT 100V D.C. BETWEEN COIL-CORE.
7. INDUCTANCE TEMPERATURE COEFFICIENT  $(0 \sim 2000) \times 10^{-6}/^{\circ}\text{C}$   $(-25 \sim +70^{\circ}\text{C})$
8. HUMIDITY TEST INDUCTANCE DEVIATION WITHIN  $\pm 5.0\%$  AFTER PUTTING THE COIL INTO THE ENVIRONMENT OF  $90 \sim 95\%$  RELATIVE HUMIDITY AND TEMPERATURE OF  $40 \pm 2^{\circ}\text{C}$  FOR 96 HOURS, THEN DRYING UNDER NORMAL CONDITION FOR 1 HOUR.
9. VIBRATION TEST INDUCTANCE DEVIATION WITHIN  $\pm 2.0\%$  AFTER VIBRATION FOR 1 HOUR. IN EACH OF THE THREE ORIENTATIONS VERTICALLY EACH OTHER (X. Y. Z) AT SWEEP VIBRATION  $(10 \sim 55 \sim 10\text{Hz})$  WITH 1.5mm P-P AMPLITUDE.
10. SHOCK TEST INDUCTANCE DEVIATION WITHIN  $\pm 2.0\%$  TESTED IN EACH OF THE THREE ORIENTATIONS VERTICALLY FOR 1 TIME AT THE SHOCK ACCELERATION OF  $981\text{m/S}^2$ , USING RUBBER BLOCK SHOCK TESTING MACHINE.

19th, Feb., 1998

| CHK.  | CHK. | DRG.      |
|-------|------|-----------|
| SUNNY | FENG | DENG<br>Y |

DRG. NO.

3/8

S-074-6020

# SPECIFICATION

TYPE

CR 5 4

## ELECTRICAL CHARACTERISTICS I (IN THE CASE OF REEL)

| NO | PART NO.        | STAMP | INDUCTANCE<br>[WITHIN]<br>※ 1 | D. C. R. (Ω)<br>[MAX. ]<br>(at 20℃) | RATED<br>CURRENT<br>(A) ※ 2 | S. R. F.<br>(MH z )<br>[ T Y P ] | SUMIDA<br>CODE |
|----|-----------------|-------|-------------------------------|-------------------------------------|-----------------------------|----------------------------------|----------------|
| 01 | CR 5 4 - 1 00MC | 100   | 10 μH ± 20 %                  | 0.10                                | 1.44                        | 30.6                             | 4751-0003      |
| 02 | CR 5 4 - 1 20MC | 120   | 12 μH ± 20 %                  | 0.12                                | 1.40                        | 27.7                             | 4751-0014      |
| 03 | CR 5 4 - 1 50MC | 150   | 15 μH ± 20 %                  | 0.14                                | 1.30                        | 25.9                             | 4751-0025      |
| 04 | CR 5 4 - 1 80MC | 180   | 18 μH ± 20 %                  | 0.15                                | 1.23                        | 23.3                             | 4751-0036      |
| 05 | CR 5 4 - 2 20MC | 220   | 22 μH ± 20 %                  | 0.18                                | 1.11                        | 19.5                             | 4751-0047      |
| 06 | CR 5 4 - 2 70MC | 270   | 27 μH ± 20 %                  | 0.20                                | 0.97                        | 17.5                             | 4751-0058      |
| 07 | CR 5 4 - 3 30LC | 330   | 33 μH ± 15 %                  | 0.23                                | 0.88                        | 16.3                             | 4751-0069      |
| 08 | CR 5 4 - 3 90LC | 390   | 39 μH ± 15 %                  | 0.32                                | 0.80                        | 15.8                             | 4751-0070      |
| 09 | CR 5 4 - 4 70LC | 470   | 47 μH ± 15 %                  | 0.37                                | 0.72                        | 13.6                             | 4751-0081      |
| 10 | CR 5 4 - 5 60KC | 560   | 56 μH ± 10 %                  | 0.42                                | 0.68                        | 12.1                             | 4751-0092      |
| 11 | CR 5 4 - 6 80KC | 680   | 68 μH ± 10 %                  | 0.46                                | 0.61                        | 11.7                             | 4751-0103      |
| 12 | CR 5 4 - 8 20KC | 820   | 82 μH ± 10 %                  | 0.60                                | 0.58                        | 10.2                             | 4751-0114      |
| 13 | CR 5 4 - 1 01KC | 101   | 100 μH ± 10 %                 | 0.70                                | 0.52                        | 9.24                             | 4751-0125      |
| 14 | CR 5 4 - 1 21KC | 121   | 120 μH ± 10 %                 | 0.93                                | 0.48                        | 8.61                             | 4751-0136      |
| 15 | CR 5 4 - 1 51KC | 151   | 150 μH ± 10 %                 | 1.10                                | 0.40                        | 8.28                             | 4751-0147      |
| 16 | CR 5 4 - 1 81KC | 181   | 180 μH ± 10 %                 | 1.38                                | 0.38                        | 6.42                             | 4751-0158      |
| 17 | CR 5 4 - 2 21KC | 221   | 220 μH ± 10 %                 | 1.57                                | 0.35                        | 5.73                             | 4751-0169      |

19th, Feb., 1998

SUMIDA CODE

4751

| CHK.  | CHK. | DRG.      |  | DRG. NO.   | 4/8 |
|-------|------|-----------|--|------------|-----|
| SUNNY | FENG | DENG<br>Y |  | S-074-6020 |     |

# SPECIFICATION

TYPE

CR 5 4

| NO | PART NO.<br> | STAMP | INDUCTANCE<br>[WITHIN]<br>※ 1 | D. C. R. (mΩ)<br>[MAX. ]<br>(at 20°C) | RATED<br>CURRENT<br>(A) ※ 2 | S. R. F.<br>(MHz)<br>[TYP] | SUMIDA<br>CODE |
|----|-----------------------------------------------------------------------------------------------|-------|-------------------------------|---------------------------------------|-----------------------------|----------------------------|----------------|
| 18 | CR 5 4 - 2 R 2 MC                                                                             | 2R2   | 2.2 μH ± 20 %                 | 23.4                                  | 3.84                        | 36.0                       | 4751-0349      |
| 19 | CR 5 4 - 2 R 7 MC                                                                             | 2R7   | 2.7 μH ± 20 %                 | 26.0                                  | 3.44                        | 32.9                       | 4751-0350      |
| 20 | CR 5 4 - 3 R 3 MC                                                                             | 3R3   | 3.3 μH ± 20 %                 | 28.6                                  | 3.20                        | 30.5                       | 4751-0351      |
| 21 | CR 5 4 - 3 R 9 MC                                                                             | 3R9   | 3.9 μH ± 20 %                 | 35.1                                  | 3.00                        | 26.5                       | 4751-0352      |
| 22 | CR 5 4 - 4 R 4 MC                                                                             | 4R4   | 4.4 μH ± 20 %                 | 39.0                                  | 2.80                        | 24.3                       | 4751-0353      |
| 23 | CR 5 4 - 5 R 0 MC                                                                             | 5R0   | 5.0 μH ± 20 %                 | 44.2                                  | 2.60                        | 23.1                       | 4751-0354      |
| 24 | CR 5 4 - 5 R 6 MC                                                                             | 5R6   | 5.6 μH ± 20 %                 | 49.4                                  | 2.48                        | 20.8                       | 4751-0355      |
| 25 | CR 5 4 - 6 R 4 MC                                                                             | 6R4   | 6.4 μH ± 20 %                 | 52.0                                  | 2.20                        | 20.4                       | 4751-0356      |
| 26 | CR 5 4 - 7 R 6 MC                                                                             | 7R6   | 7.6 μH ± 20 %                 | 62.4                                  | 2.08                        | 19.6                       | 4751-0357      |
| 27 | CR 5 4 - 8 R 5 MC                                                                             | 8R5   | 8.5 μH ± 20 %                 | 67.6                                  | 1.84                        | 18.9                       | 4751-0358      |

※ 1 : MEASURING CONDITIONS L 10 μH ~ 82 μH ; at 2.52 MHz  
 100 μH ~ 220 μH ; at 1 kHz  
 2.2 μH ~ 8.5 μH ; at 7.96 MHz 

※ 2 : THIS INDICATES THE VALUE OF CURRENT WHEN THE INDUCTANCE IS 10% LOWER THAN ITS INITIAL VALUE AT D.C. SUPERPOSITION OR D.C. CURRENT WHEN AT Δt=40°C WHICHEVER IS LOWER. (Ta=20°C)

19th, Feb., 1998

SUMIDA CODE

4751

| CHK.  | CHK. | DRG.      | DRG. NO.   |
|-------|------|-----------|------------|
| SUNNY | FENG | DENG<br>Y | S-074-6020 |

# SPECIFICATION

TYPE

CR 5 4

## ELECTRICAL CHARACTERISTICS II (IN THE CASE OF BOX)

| NO | PART NO.        | STAMP | INDUCTANCE<br>[WITHIN]<br>※ 1 | D. C. R. (Ω)<br>[MAX. ]<br>(at 20℃) | RATED<br>CURRENT<br>(A) ※ 2 | S. R. F.<br>(MH z )<br>[ T Y P ] | SUMIDA<br>CODE |
|----|-----------------|-------|-------------------------------|-------------------------------------|-----------------------------|----------------------------------|----------------|
| 28 | CR 5 4 - 1 00MB | 100   | 10 μH ± 20 %                  | 0.10                                | 1.44                        | 30.6                             | 4751-0331      |
| 29 | CR 5 4 - 1 20MB | 120   | 12 μH ± 20 %                  | 0.12                                | 1.40                        | 27.7                             | 4751-0332      |
| 30 | CR 5 4 - 1 50MB | 150   | 15 μH ± 20 %                  | 0.14                                | 1.30                        | 25.9                             | 4751-0333      |
| 31 | CR 5 4 - 1 80MB | 180   | 18 μH ± 20 %                  | 0.15                                | 1.23                        | 23.3                             | 4751-0334      |
| 32 | CR 5 4 - 2 20MB | 220   | 22 μH ± 20 %                  | 0.18                                | 1.11                        | 19.5                             | 4751-0335      |
| 33 | CR 5 4 - 2 70MB | 270   | 27 μH ± 20 %                  | 0.20                                | 0.97                        | 17.5                             | 4751-0336      |
| 34 | CR 5 4 - 3 30LB | 330   | 33 μH ± 15 %                  | 0.23                                | 0.88                        | 16.3                             | 4751-0337      |
| 35 | CR 5 4 - 3 90LB | 390   | 39 μH ± 15 %                  | 0.32                                | 0.80                        | 15.8                             | 4751-0338      |
| 36 | CR 5 4 - 4 70LB | 470   | 47 μH ± 15 %                  | 0.37                                | 0.72                        | 13.6                             | 4751-0339      |
| 37 | CR 5 4 - 5 60KB | 560   | 56 μH ± 10 %                  | 0.42                                | 0.68                        | 12.1                             | 4751-0340      |
| 38 | CR 5 4 - 6 80KB | 680   | 68 μH ± 10 %                  | 0.46                                | 0.61                        | 11.7                             | 4751-0341      |
| 39 | CR 5 4 - 8 20KB | 820   | 82 μH ± 10 %                  | 0.60                                | 0.58                        | 10.2                             | 4751-0342      |
| 40 | CR 5 4 - 1 01KB | 101   | 100 μH ± 10 %                 | 0.70                                | 0.52                        | 9.24                             | 4751-0343      |
| 41 | CR 5 4 - 1 21KB | 121   | 120 μH ± 10 %                 | 0.93                                | 0.48                        | 8.61                             | 4751-0344      |
| 42 | CR 5 4 - 1 51KB | 151   | 150 μH ± 10 %                 | 1.10                                | 0.40                        | 8.28                             | 4751-0345      |
| 43 | CR 5 4 - 1 81KB | 181   | 180 μH ± 10 %                 | 1.38                                | 0.38                        | 6.42                             | 4751-0346      |
| 44 | CR 5 4 - 2 21KB | 221   | 220 μH ± 10 %                 | 1.57                                | 0.35                        | 5.73                             | 4751-0347      |

19th, Feb., 1998

SUMIDA CODE

4751

| CHK.  | CHK. | DRG.      |  | DRG. NO.   | 6/8 |
|-------|------|-----------|--|------------|-----|
| SUNNY | FENG | DENG<br>Y |  | S-074-6020 |     |

# SPECIFICATION

TYPE

CR54

| NO | PART NO.<br>$\triangle$ | STAMP | INDUCTANCE<br>[WITHIN]<br>※ 1 | D. C. R. (mΩ)<br>[MAX.]<br>(at 20°C) | RATED<br>CURRENT<br>(A) ※ 2 | S. R. F.<br>(MHz)<br>[TYPE] | SUMIDA<br>CODE |
|----|-------------------------|-------|-------------------------------|--------------------------------------|-----------------------------|-----------------------------|----------------|
| 45 | CR54-2R2MB              | 2R2   | 2.2 μH ± 20 %                 | 23.4                                 | 3.84                        | 36.0                        | 4751-0359      |
| 46 | CR54-2R7MB              | 2R7   | 2.7 μH ± 20 %                 | 26.0                                 | 3.44                        | 32.9                        | 4751-0360      |
| 47 | CR54-3R3MB              | 3R3   | 3.3 μH ± 20 %                 | 28.6                                 | 3.20                        | 30.5                        | 4751-0361      |
| 48 | CR54-3R9MB              | 3R9   | 3.9 μH ± 20 %                 | 35.1                                 | 3.00                        | 26.5                        | 4751-0362      |
| 49 | CR54-4R4MB              | 4R4   | 4.4 μH ± 20 %                 | 39.0                                 | 2.80                        | 24.3                        | 4751-0363      |
| 50 | CR54-5R0MB              | 5R0   | 5.0 μH ± 20 %                 | 44.2                                 | 2.60                        | 23.1                        | 4751-0364      |
| 51 | CR54-5R6MB              | 5R6   | 5.6 μH ± 20 %                 | 49.4                                 | 2.48                        | 20.8                        | 4751-0365      |
| 52 | CR54-6R4MB              | 6R4   | 6.4 μH ± 20 %                 | 52.0                                 | 2.20                        | 20.4                        | 4751-0366      |
| 53 | CR54-7R6MB              | 7R6   | 7.6 μH ± 20 %                 | 62.4                                 | 2.08                        | 19.6                        | 4751-0367      |
| 54 | CR54-8R5MB              | 8R5   | 8.5 μH ± 20 %                 | 67.6                                 | 1.84                        | 18.9                        | 4751-0368      |

※ 1 : MEASURING CONDITIONS L 10 μH ~ 82 μH ; at 2.52 MHz  
 100 μH ~ 220 μH ; at 1 kHz  
 2.2 μH ~ 8.5 μH ; at 7.96 MHz  $\triangle$

※ 2 : THIS INDICATES THE VALUE OF CURRENT WHEN THE INDUCTANCE IS 10% LOWER THAN ITS INITIAL VALUE AT D.C. SUPERPOSITION OR D.C. CURRENT WHEN AT Δt=40°C WHICHEVER IS LOWER. (Ta=20°C)

19th, Feb., 1998

SUMIDA CODE

4751

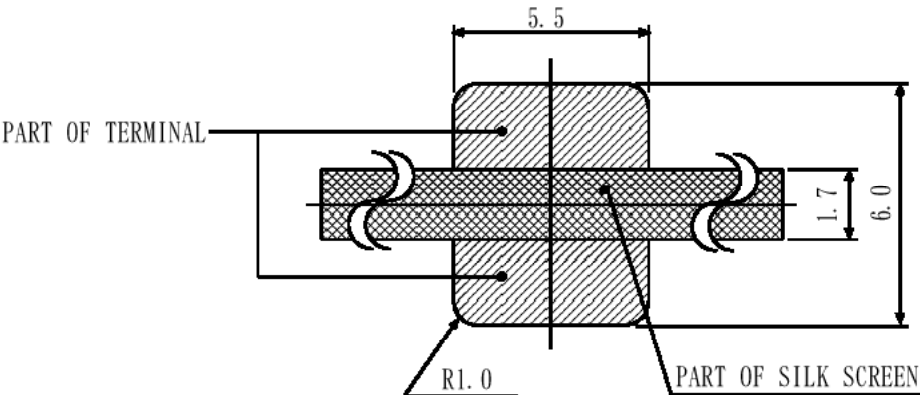
|       |      |           |  |            |       |
|-------|------|-----------|--|------------|-------|
| CHK.  | CHK. | DRG.      |  | DRG. NO.   | 7 / 8 |
| SUNNY | FENG | DENG<br>Y |  | S-074-6020 |       |

SPECIFICATION

TYPE

CR 5 4

DIMENSION RECOMMENDED (mm)



PLEASE COAT WITH SILK BETWEEN TERMINAL.

THICKNESS OF METALMASK RECOMMENDED 0.15t.

19th, Feb., 1998

|       |      |           |
|-------|------|-----------|
| CHK.  | CHK. | DRG.      |
| SUNNY | FENG | DENG<br>Y |

DRG. NO.

8/8

S-074-6020