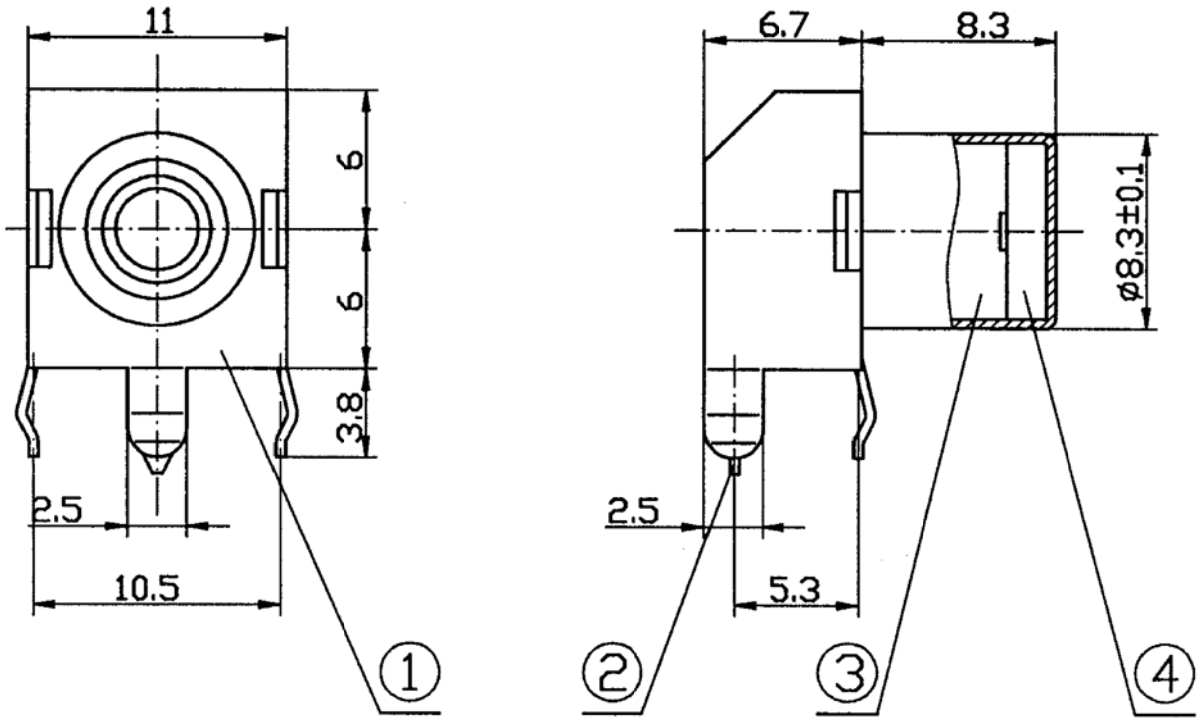
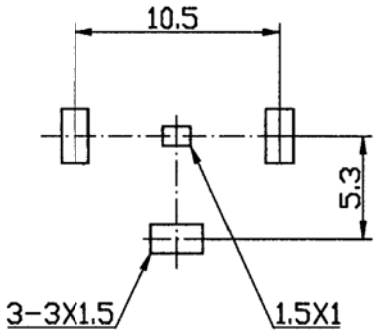
DWG. NO. JK-0517-A REV. "B"

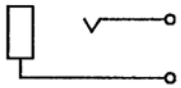
PART NO.: RJ-1003-30X-NL




MOUNTING HOLES

COLOR VIEW

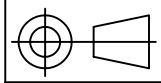


SCHEMATIC

NOTE: ALL DIMS ARE IN MM.

| NO. | PART NAME | QTY | MATERIAL | REMARKS |
|---|---|---|---|---|
| 4 | WASHER | 1 | ABS(BLACK) 94HB | ——— |
| 3 | RING | 1 | ABS(BLACK) 94HB | ——— |
| 2 | TERMINAL | 1 | H62 t=0.3 | D.Cu/Sn |
| 1 | FRAME | 1 | H62 t=0.4 | D.Cu/Sn |

PROJECTION



RDI Research Development Innovation

RDI, Inc. 400 Columbus Avenue Valhalla, NY 10595

SCALE NONE

TITLE: RCA JACK-RoHS COMPLIANT

TOLERANCE EXCEPT AS NOTED

DEC. MILLIMETERS
0~6: ±0.1
6~20: ±0.2
>20: ±0.3

ANG. ±1°

| DR. | DATE | REF. | SHEET |
|---|---|---|---|
| JOEY | 9/11/01 | P/N: RJ-1003-30X-NL | 1 OF 4 |

| CK. | PRE- | DRAWING NO. | SIZE | REV. |
|---|---|---|---|---|
| SL | JK | 0517 | A | B |

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| ECN# | DATE | SYM | REVISION RECORD | AUTH | BY |
|---|---|---|---|---|---|
| 06-198 | 03/18/06 | B | CHANGED THE PRINT TO RoHS COMPLIANT | VC | JY |
| 05-267 | 6/2/05 | A | REVISED P/N & ADDED A CHART | MY | JY |

DWG. NO. JK-0517-A REV. "B"

PART NO.: RJ-1003-30X-NL

## 1. SCOPE

THIS SPECS IS SUITABLE FOR AV PIN JACK,WHICH IS SUITABLE FOR INPUT/OUTPUT OF AUDION/VIDEO SIGNAL,USED AS CONNECTION PART.

## 2. CONSTRUCTION

THE EXTERNAL DIMENSIONS OF THIS PRODUCT AND ITS INTERNAL TOLERANCES ARE BASED ON RELEVANT DRAWINGS.

## 3. MATERIAL

REFER TO THE MATERIAL SHEET SHOWED IN THE DRAWING SPECIFIES

## 4. APPLIED ENVIRONMENT

(1) TEMPERATURE: -40~70℃
(2) RELATIVE HUMIDITY: <90%(40℃)
(3) PH VALUE: PH6~8

## 5. ELECTRICAL PROPERTIES

| No. | ITEMS | TECHNICAL CONDITIONS | TECHNICAL REQUIREMENTS |
|---|---|---|---|
| 5.1 | RATING LOAD | DC 50V | 0.2A |
| 5.2 | DIELECTRIC STRENGTH | AC 500V(50~60Hz) 1 MIN 2mA | NO ABNORMALITY,NO BREAKDOWN,NO OVER ARC. |
| 5.3 | CONTACT RESISTANCE | FREQUENCY: 1000Hz;CURRENT <100mA VOLTAGE: 20mV | ≤20mOHM |
| 5.4 | INSULATION RESISTANCE | DC 500V | ≥100MOHM |

## 6. MECHANICAL PROPERTIES

| No. | ITEMS | TECHNICAL CONDITIONS | TECHNICAL REQUIREMENTS |
|---|---|---|---|
| 6.1 | INSERTION FORCE | USE STANDARD PLUG.MEASURE IT AFTER 3 TIMES OF INSERTION | 3~25N |
| | EXTRACTION FORCE | USE STANDARD PLUG.MEASURE IT AFTER 3 TIMES OF INSERTION | 3~25N |
| 6.2 | TERMINAL STRENGTH | APPLY 10N STATIC LOAD,1 MIN IN ANY DIRECTION. | APPEARANCE: NO DEFORMING AND LOOSING |
| | | | CONTACT RESISTANCE: ≤30mOHM |
| | | | INSULATION RESISTANCE: ≥100MOHM |
| | | | VOLTAGE WITHSTANDING: AC500V,2mA,1MIN,NO BREAKDOWN,NO OVER ARC. |
| 6.3 | MECHANICAL LIFE | INSERTING AND EXTRACTING 5000 TIMES WITHOUT LOAD AT THE SPEED OF 10~20 CYCLES PER MINUTE. | APPEARANCE: NO DEFORMING AND LOOSING |
| | | | CONTACT RESISTANCE: ≤30mOHM |
| | | | INSULATION RESISTANCE: ≥100MOHM |
| | | | VOLTAGE WITHSTANDING: AC500V,2mA,1MIN,NO BREAKDOWN,NO OVER ARC. |
| | | | INSERTION FORCE: ≤30N |
| | | | EXTRACTION FORCE: 3~25N |

## 7. SOLDERING PROPERTIES

| No. | ITEMS | TECHNICAL CONDITIONS | TECHNICAL REQUIREMENTS |
|---|---|---|---|
| 7.1 | SOLDER-ABILITY | SOLDER BATH METHOD: TEMPERATURE: 230℃±5 ℃ FLUX DIPPING TIME 3 SECONDS TIME:3±0.5s | DIPPING TIME≤3s |
| | | | SOLDER COVERED SURFACE≥95% |
| 7.2 | SOLDERING WITHSTANDING | SOLDER BATH METHOD: TEMPERATURE: 260±5° FLUX DIPPING TIME 3 SECONDS TIME: 10±1s | APPEARANCE: NO DEFORMING AND LOOSING |
| | | | CONTACT RESISTANCE: ≤30mOHM |
| | | | INSULATION RESISTANCE: ≥100MOHM |
| | | | VOLTAGE WITHSTANDING: AC500V,2mA,1MIN,NO BREAKDOWN,NO OVER ARC. |
| | | | INSERTION FORCE: ≤30N |
| | | | EXTRACTION FORCE: 3~25N |

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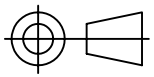
PROJECTION



SCALE N/A

TOLERANCE EXCEPT AS NOTED
DEC. INCHES N/A
DEC. MILLIMETERS N/A
ANG. N/A

RDI Research Development Innovation

RDI, Inc. 400 Columbus Avenue Valhalla, NY 10595

TITLE: RCA JACK-RoHS COMPLIANT

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| JOEY | 9/11/01 | P/N: RJ-1003-30X-NL | 2 OF 4 |

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## 8. ENVIRONMENT PROPERTIES

| No. | ITEMS | TECHNICAL CONDITIONS | TECHNICAL REQUIREMENTS |
|---|---|---|---|
| 8.1 | HEAT WITHSTANDING | TEMPERATURE: 80±2℃, KEEP 120 HOURS AND MEASURE AFTER ONE HOUR RECOVERY IN STANDARD ATMOSPHERIC CONDITIONS | APPEARANCE: NO DEFORMING AND LOOSING |
| | | | CONTACT RESISTANCE: ≤30mOHM |
| | | | INSULATION RESISTANCE: ≥100MOHM |
| | | | VOLTAGE WITHSTANDING: AC500V,2mA,1MIN,NO BREAKDOWN,NO OVER ARC. |
| | | | INSERTION FORCE: ≤30N |
| | | | EXTRACTION FORCE: 3~25N |
| | | | TERMINAL ROBUSTNESS: 10N,1MIN,APPEARANCE: NO DEFORMING AND DAMAGE. |
| 8.2 | HUMIDITY WITHSTANDING | TEMPERATURE: 55 ±2℃, RELATIVE HUMIDITY: 90~95% TIME: 120HOURS MEASURE AFTER ONE HOUR RECOVERY IN STANDARD ATMOSPHERIC CONDITIONS | APPEARANCE: NO DEFORMING AND LOOSING |
| | | | CONTACT RESISTANCE: ≤30mOHM |
| | | | INSULATION RESISTANCE: ≥100MOHM |
| | | | VOLTAGE WITHSTANDING: AC500V,2mA,1MIN,NO BREAKDOWN,NO OVER ARC. |
| | | | INSERTION FORCE: ≤30N |
| | | | EXTRACTION FORCE: 3~25N |
| | | | TERMINAL ROBUSTNESS: 10N,1MIN,APPEARANCE: NO DEFORMING AND DAMAGE. |
| 8.3 | VIBRATION WITHSTANDING | FREQUENCY: 10~55Hz DOUBLE AMPLITUDE: 1.5mm IN 3 INTERSECTIONAL AXIS,2 HOURS EACH AXIS,TOTAL 6 HOURS | APPEARANCE: NO DEFORMING AND LOOSING |
| | | | CONTACT RESISTANCE: ≤30mOHM |
| | | | INSULATION RESISTANCE: ≥100MOHM |
| | | | VOLTAGE WITHSTANDING: AC500V,2mA,1MIN,NO BREAKDOWN,NO OVER ARC. |
| | | | INSERTION FORCE: ≤30N |
| | | | EXTRACTION FORCE: 3~25N |

| No. | ITEMS | TECHNICAL CONDITIONS | TECHNICAL REQUIREMENTS |
|---|---|---|---|
| 8.4 | SHOCK WITHSTANDING | ACCELERATION: 981m/s²(100G) SUSTAINING REPULSE: 6ms IN 3 INTERSECTION AXIS,6 SURFACES,3 SHOCKS EACH SURFACE,TOTAL 18 TIMES OF SHOCK. | APPEARANCE: NO DEFORMING AND LOOSING |
| | | | CONTACT RESISTANCE: ≤30mOHM |
| | | | INSULATION RESISTANCE: ≥100MOHM |
| | | | VOLTAGE WITHSTANDING: AC500V,2mA,1MIN,NO BREAKDOWN,NO OVER ARC. |
| | | | INSERTION FORCE: ≤30N |
| | | | EXTRACTION FORCE: 3~25N |
| | | | TERMINAL ROBUSTNESS: 10N,1MIN,APPEARANCE: NO DEFORMING AND DAMAGE. |
| 8.5 | COLD WITHSTANDING | TEMPERATURE: -40 ±3℃, TIME: 120HOURS MEASURE AFTER ONE HOUR RECOVERY IN STANDARD ATMOSPHERIC CONDITIONS | APPEARANCE: NO DEFORMING AND LOOSING |
| | | | CONTACT RESISTANCE: ≤30mOHM |
| | | | INSULATION RESISTANCE: ≥100MOHM |
| | | | VOLTAGE WITHSTANDING: AC500V,2mA,1MIN,NO BREAKDOWN,NO OVER ARC. |
| | | | INSERTION FORCE: ≤30N |
| | | | EXTRACTION FORCE: 3~25N |
| | | | TERMINAL ROBUSTNESS: 10N,1MIN,APPEARANCE: NO DEFORMING AND DAMAGE. |

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PROJECTION

SCALE N/A

TOLERANCE EXCEPT AS NOTED

DEC. INCHES N/A

DEC. MILLIMETERS N/A

ANG. N/A

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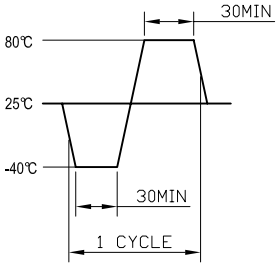
| No. | ITEMS | TECHNICAL CONDITIONS | TECHNICAL REQUIREMENTS |
|---|---|---|---|
| 8.6 | TEMPERATURE CYCLE | DECREASE FROM 25℃ TO -40℃ IN 30 MINUTES; THEN INCREASE FROM -40℃ TO 80℃ TO COMPLETE ONE CYCLE.TOTAL 200 CYCLES. MEASURE AFTER 24 HOURS OF RECOVERY IN STANDARD ATMOSPHERIC CONDITIONS   | APPEARANCE: NO DEFORMING AND LOOSING<br>CONTACT RESISTANCE: ≤30mOHM<br>INSULATION RESISTANCE: ≥100MOHM<br>VOLTAGE WITHSTANDING: AC500V,2mA,1MIN,NO BREAKDOWN,NO OVER ARC.<br>INSERTION FORCE: ≤30N<br>EXTRACTION FORCE: 3~25N<br>TERMINAL ROBUSTNESS: 10N,1MIN,APPEARANCE: NO DEFORMING AND DAMAGE. |

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PROJECTION

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DEC. MILLIMETERS N/A

ANG. N/A

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