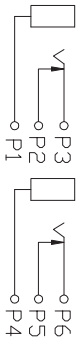
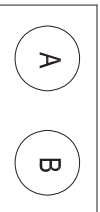


CIRCUIT DIAGRAM



COLOR LAYOUT



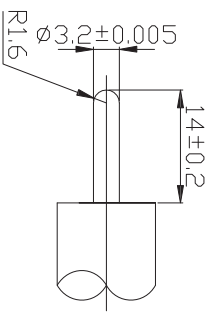
ORDERING CHART: RH1039M-XXX-G-NL

RH1039M DUAL RCA WITH M= MOUNTING HOLE  
 XXX= REFER TO COLOR CHART \*ON THE LEFT RCA AS \*A\* AND THE RIGHT RCA AS \*B\*  
 G= GOLD PLATED BARRELS  
 NL= ROHS COMPLIANT.

ORDER CHART: RH1039M-XX-G-NL

|                   |         |     |     |     |     |     |     |     |     |
|-------------------|---------|-----|-----|-----|-----|-----|-----|-----|-----|
| MODEL No.         | 010     | 020 | 030 | 040 | 050 | 060 | 070 | 080 | 090 |
| COLOR             | R=RED   | A   | R   | B   | R   | W   | W   | O   | Y   |
| W=WHITE           | B=BLACK | B   | W   | B   | B   | R   | Y   | O   | Y   |
| Y=YELLOW/O=Orange |         |     |     |     |     |     |     |     |     |

GAUGE PLUG



- TECHNICAL REQUIREMENT:  
 1. THIS PRODUCT SHOULD MEET EU ROHS RELATED REQUIREMENT.  
 2. THE SURFACE OF PLASTIC PART SHOULD BE WITHOUT ANY CRACKLE SUCH AS BURR, LACK, AND SO ON PHENOMENON.  
 3. THE SURFACE OF METAL PART SHOULD BE WITHOUT ANY DEFECT SUCH AS SACUR, NICK, OXIDATION AND PLATING PROBLEM.  
 4. THE ELECTRONIC PERFORMANCE SHOULD BE THE SAME AS SPEC.  
 5. THE UN-SPECIFIED TOLERANCE IS:

< 6±0.2  
 6-20 ±0.3  
 > 20 ±0.4

|        |         |     |   |      |    |
|--------|---------|-----|---|------|----|
| 13-040 | 5/2/13  | C   | ADD ADDITIONAL INSERT COLOR TO CHART 'D= Orange'  | GM   | TL |
| 13-034 | 4/5/13  | B   | ADD *OPTION 090* into color chart as Y over Y for yellow/yellow inserts for A & B barrel of the RCA | GM   | TL |
| 11-060 | 4/21/11 | A   | ADD PC LEAD DIMENSION 4.7MM +/- 0.3   | GM   | AL |
| ECN#   | DATE    | SYM | REVISION RECORD   | AUTH | BY |

DIMENSIONS OF PC BOARD HOLES(COMMENT)  
 BOTTOM VIEW(=1.6mm)

|    |                 |     |                 |         |
|----|-----------------|-----|-----------------|---------|
| No | NAME            | QTY | MATERIAL        | PLATING |
| 1  | OUTER CONDUCTOR | 2   | H66 BRASS1=0.36 | Au      |
| 2  | BASE            | 1   | PBT             |         |
| 3  | WASHER          | 2   | PBT             |         |
| 4  | TIP CONTACT     | 2   | QSn65-0.1 T=0.3 | Ag      |
| 5  | BREAK CONTACT   | 2   | H62 T=0.4       | Ag      |

PROJECTION

SCALE: N/A

TOLERANCE: EXCEPT AS NOTED

DEC. MILLIMETERS: 0-6: ±0.2, 6-20: ±0.3, >20: ±0.4

ANG.: N/A

**RDI** Research Develop Innovate

RDI, Inc. 333 North Bedford Road, Suite 135, Mount Kisco, NY 10549

|      |          |                           |        |
|------|----------|---------------------------|--------|
| DR.  | DATE     | REF.                      | SHEET  |
| Aris | 04/12/11 | PART NO. RH1039M-XXX-G-NL | 1 OF 3 |
| CK.  | PRE-     | DRAWING NO. 4062          | REV. C |
| Greg | JK       | SIZE                      |        |

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1. SCOPE  
THIS SPECS IS SUITABLE FOR AV PIN JACK WHICH IS SUITABLE FOR INPUT/OUTPUT OF AUDIO/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 SHOWN IN THE DRAWING
4. APPLIED ENVIRONMENT  
(1) TEMPERATURE: -40-70°C  
(2) RELATIVE HUMIDITY: <90%-95%(55°C±2°C)
5. ELECTRICAL PROPERTIES

| No. | ITEMS                 | TECHNICAL CONDITIONS  | TECHNICAL REQUIREMENTS                     |
|-----|-----------------------|---|--|
| 5.1 | RATING LOAD           | DC 12V  | 1A   |
| 5.2 | DIELECTRIC STRENGTH   | AC 500V(50Hz) 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 | APPLY DC 500V BETWEEN PIN AND OUT CONDUCTOR AND TEST IT AFTER 1 MIN | ≥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 EXTRACTION  | 3-25N   |
| 6.2 | TERMINAL STRENGTH | PULL THE TERMINAL WITH 20 N FORCE IN AXES DIRECTION FOR 1 MINUTE. THE JACK WILL NOT BE BROKEN OR DAMAGED. | APPEARANCE: NO DEFORMING AND LOOSING  |
|     |                   |   | CONTACT RESISTANCE: ≤30mOHM<br>INSULATION RESISTANCE: ≥100MOHM<br>VOLTAGE WITHSTANDING: AC500V, 2mA, 1MIN, NO BREAKDOWN, NO OVER ARC. |

| No. | ITEMS                    | TECHNICAL CONDITIONS  | TECHNICAL REQUIREMENTS  |
|-----|--------------------------|---|---|
| 6.3 | MECHANICAL LIFE          | INSERTING AND EXTRACTING 1000 TIMES WITHOUT LOAD AT THE SPEED OF 10-20 CYCLES PER MINUTE.                 | 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: ≤3-25N<br>EXTRACTION FORCE: 3-25N |
| 6.4 | STRENGTH OF TAPPING PANT | THE TO PINING PART SHALL BE CAPABLE OF TORQUE OF 1 Nm FOR 10 SECONDS BY M3X8 TAPPING SCREW AND PANEL(T/L) | WITHOUT LOOSING AND BREAKDOWN ETC. ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED.   |

7. SOLDERING PROPERTIES

| No. | ITEMS                  | TECHNICAL CONDITIONS  | TECHNICAL REQUIREMENTS   |
|-----|------------------------|---|--|
| 7.1 | SOLDER-ABILITY         | SOLDER BATH METHOD: TEMPERATURE: 230°C ± 5 °C FLUX DIPPING TIME 3± 0.5s SECONDS | SOLDER COVERED SURFACE: >90%   |
| 7.2 | SOLDERING WITHSTANDING | SOLDER BATH METHOD: TEMPERATURE: 280± 5°C FLUX DIPPING TIME : < 5 ± 1s          | APPEARANCE: TERMINAL NO LOOSING  |
|     |                        |   | CONTACT RESISTANCE: ≤50mOHM<br>INSULATION RESISTANCE: ≥100MOHM<br>VOLTAGE WITHSTANDING: AC500V, 2mA, 1MIN, NO BREAKDOWN, NO OVER ARC.<br>INSERTION FORCE: 3-25N<br>EXTRACTION FORCE: 3-25N |

| ECN#   | DATE    | SYM | REVISION RECORD   |
|--------|---------|-----|---|
| 13-040 | 5/2/13  | C   | ADD ADDITIONAL INSERT COLOR TO CHART 'D= Orange'  |
| 13-034 | 4/5/13  | B   | ADD *OPTION 090* into color chart as Y over Y for yellow/yellow inserts for A & B barrel of the RCA |
| 11-060 | 4/21/11 | A   | ADD PC LEAD DIMENSION 4.7MM +/- 0.3   |

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| 11-060 | 4/21/11 | A   | ADD PC LEAD DIMENSION 4.7MM +/- 0.3   |

PROJECTION



SCALE: N/A

TOLERANCE: EXCEPT AS NOTED

DR: Aris DATE: 04/12/11 REF: PART NO. RH1039M-XXX-G-NL

CK: Greg PRE- JK DRAWING NO. 4062 SIZE F REV. C

TITLE: Dual RCA JACK/ROHS Compliant

SHEET 2 OF 3



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8. ENVIRONMENT PROPERTIES

| No. | ITEMS                 | TECHNICAL CONDITIONS  | TECHNICAL REQUIREMENTS   |
|-----|-----------------------|---|--|
| 8.1 | HEAT WITHSTANDING     | TEMPERATURE: 70± 2°C, KEEP 96 HOURS AND MEASURE AFTER ONE HOUR RECOVERY IN STANDARD ATMOSPHERIC CONDITIONS                        | APPEARANCE: NO DEFORMING AND LOOSING<br>CONTACT RESISTANCE: ≤ 50mOHM<br>INSULATION RESISTANCE: ≥ 100MOMH<br>VOLTAGE WITHSTANDING: AC500V, 2mA, 1MIN, NO BREAKDOWN, NO OVER ARC.<br>INSERTION FORCE: 3-25N<br>EXTRACTION FORCE: 3-25N |
| 8.2 | HUMIDITY WITHSTANDING | TEMPERATURE: 40 ± 2°C, RELATIVE HUMIDITY: 90-95% TIME: 96HOURS MEASURE AFTER ONE HOUR RECOVERY IN STANDARD ATMOSPHERIC CONDITIONS | APPEARANCE: NO DEFORMING AND LOOSING<br>CONTACT RESISTANCE: ≤ 50mOHM<br>INSULATION RESISTANCE: ≥ 10MOMH<br>VOLTAGE WITHSTANDING: AC500V, 2mA, 1MIN, NO BREAKDOWN, NO OVER ARC.<br>INSERTION FORCE: 3-25N<br>EXTRACTION FORCE: 3-25N  |
| 8.3 | COLD WITHSTANDING     | TEMPERATURE: -40±3°C, TIME: 96HOURS MEASURE AFTER ONE HOUR RECOVERY IN STANDARD ATMOSPHERIC CONDITIONS.                           | APPEARANCE: NO DEFORMING AND LOOSING<br>CONTACT RESISTANCE: ≤ 50mOHM<br>INSULATION RESISTANCE: ≥ 10MOMH<br>VOLTAGE WITHSTANDING: AC500V, 2mA, 1MIN, NO BREAKDOWN, NO OVER ARC.<br>INSERTION FORCE: 3-25N<br>EXTRACTION FORCE: 3-25N  |

| No. | ITEMS             | TECHNICAL CONDITIONS  | TECHNICAL REQUIREMENTS   |
|-----|-------------------|---|--|
| 8.4 | TEMPERATURE CYCLE | <p>DECREASE FROM 25°C TO -40°C IN 30 MINUTES; THEN INCREASE FROM -40°C TO 70°C TO COMPLETE ONE CYCLE. TOTAL 5 CYCLES. MEASURE AFTER 24 HOURS OF RECOVERY IN STANDARD ATMOSPHERIC CONDITIONS</p> | APPEARANCE: NO DEFORMING AND LOOSING<br>CONTACT RESISTANCE: ≤ 50mOHM<br>INSULATION RESISTANCE: ≥ 100MOMH<br>VOLTAGE WITHSTANDING: AC500V, 2mA, 1MIN, NO BREAKDOWN, NO OVER ARC.<br>INSERTION FORCE: 3-25N<br>EXTRACTION FORCE: 3-25N<br>APPEARANCE: HIGH-LOW TEMPERATURE TESTING CHAMBER |

9. THIS PRODUCT SHOULD MEET EU ROHS RELATED REQUIREMENT.

| ECN#   | DATE    | SYM | REVISION RECORD   |
|--------|---------|-----|---|
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| No.    | ITEMS   | TECHNICAL CONDITIONS | TECHNICAL REQUIREMENTS |
|--------|---------|----------------------|------------------------|
| 13-040 | 5/2/13  | GM                   | TL                     |
| 13-034 | 4/5/13  | GM                   | TL                     |
| 11-060 | 4/21/11 | GM                   | AL                     |

**RD1** Research Develop Innovate  
 RD1, Inc. 333 North Bedford Road, Suite 135, Mount Kisco, NY 10549

PROJECTION

SCALE: N/A  
 TOLERANCE: N/A  
 EXCEPT AS NOTED  
 DEC. MILLIMETERS: N/A  
 DEC. INCHES: N/A  
 DR. DATE: 04/12/11  
 PRE-: JK  
 REF. PART NO. RH1039M-XXX-G-NL  
 DRAWING NO. 4062  
 SIZE: F  
 SHEET: 3 OF 3  
 REV. C

TITLE: Dual RCA JACK/ROHS Compliant

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