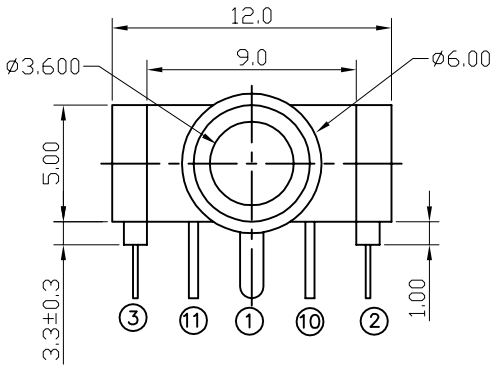
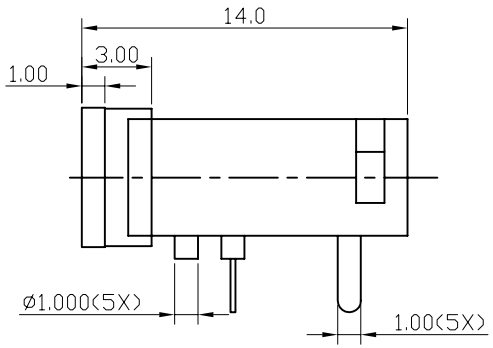
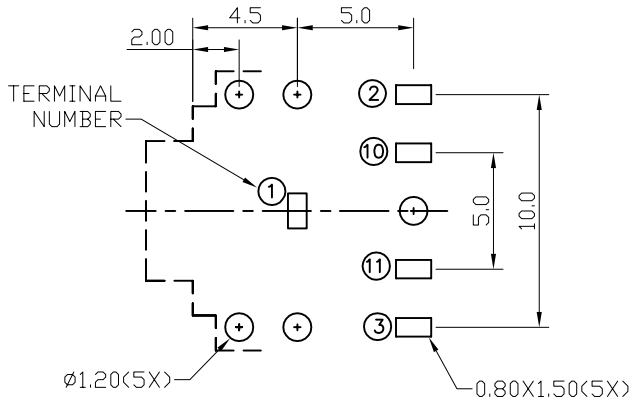
DWG. NO. JK-0774-F REV. "B"

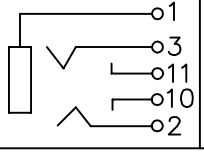
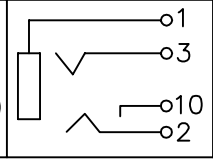
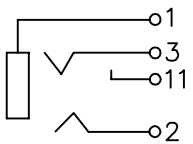
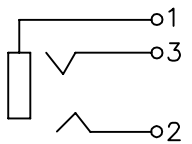
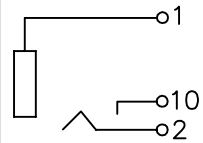
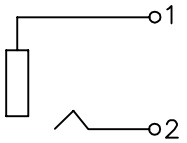
PART NO. RSJ-10X-SERIES-NL







PCB LAYOUT
(BOTTOM VIEW)

MODEL NO.	RSJ-100-NL	RSJ-101-NL	RSJ-102-NL	RSJ-103-NL	RSJ-104-NL	RSJ-105-NL
SCHEMATIC						

* MATERIAL

TERMINAL 1 : COPPER ALLOY
TERMINAL 2 : COPPER ALLOY
TERMINAL 3 : COPPER ALLOY
TERMINAL 10: BRASS
TERMINAL 11: BRASS
BUSHING : BRASS
HOUSING : PBT

SPECIFICATIONS

1. INSULATION RESISTANCE OF ADJACENT OPEN TERMINALS SHALL NOT BE LESS THAN 50 MEGOHMS WHEN MEASURED WITH 500 VOLTS RESISTANCE METER.
2. CONNECTOR SHALL WITHSTAND 500 VOLTS (RMS) BETWEEN ADJACENT OPEN TERMINAL FOR ONE MINUTE.
3. CONTACT RESISTANCE OF NORMALLY CLOSED TERMINALS SHALL NOT EXCEED 0.03 OHMS WHEN MEASURED AT A CURRENT OF ONE AMPERE BY VOLTAGE DROP METHOD.
4. CONNECTOR SHALL WITHSTAND 5000 CYCLES OF INSERTIONS AND WITHDRAWAL WITH TESTING PLUG,CONTACT RESISTANCE SHALL NOT EXCEED 0.1 OHM.

NOTE: ALL DIMES ARE IN mm

ECN#	DATE	SYM	REVISION RECORD	AUTH	BY
07-265	05/17/07	B	REVISED RDI P/N TO RSJ-10X-SERIES-NL	VF	JY
05-599	11/30/05	A	CHANGED THE PRINT:SEE VOID COPY	VC	JY

PROJECTION

SCALE N/A

TOLERANCE EXCEPT AS NOTED
DEC. MILLIMETERS
0.0 ±0.2
0.00 ±0.1
0.000 ±0.05
ANG. N/A

RDI Research Develop Innovate

RDI, Inc. 400 Columbus Avenue Valhalla, NY 10595

TITLE: 3.5mm STERO JACK-RoHS COMPLIANT

DR.	DATE	REF.	SHEET
JOEY	07/25/02	P/N: RSJ-10X-SERIES-NL	1 OF 2

CK.	PRE-	DRAWING NO.	SIZE	REV.
S.L.	JK	0774	F	B

THIS DOCUMENT IS OWNED BY, AND THE INFORMATION CONTAINED IN IT IS PROPRIETARY TO, RDI, BY RECEIPT HEREOF THE HOLDER AGREES NOT TO USE THE INFORMATION AND NOT TO DISCLOSE IT TO ANY THIRD PARTY, NOR REPRODUCE THIS DOCUMENT WITHOUT THE WRITTEN CONSENT OF RDI, AND AGREES TO RETURN THIS DOCUMENT FORTHWITH UPON REQUEST.

DWG. NO. JK-0774-F REV. "B"

PART NO. RSJ-10X-SERIES-NL

SPECIFICATION AND TESTING REPORT

A. GENERAL SCOPE:

THIS SPECIFICATION COVERS THE REQUIREMENTS FOR DIRECT CIRCUIT POWER SUPPLY FOR ALL N AUDIO SYSTEMS AND SIMILAR EQUIPMENT

B. MATED PLUG

THE MATING PLUG SHALL BE IN 3.5mm DIAMETER.

C. COMPONENTS AND MATERIALS:

SHUNT TERMINAL: BRASS,Tin PLATED
TIP SPRING: COPPER ALLOY,Tin PLATED
RING SPRING: COPPER,ALLOY,Tin PLATED
GROUND TERMINAL: BRASS,Tin PLATED
BUSHING: BRASS,NICKEL PLATED
PLASTIC HOUSING: PBT

D. ELECTRICAL REQUIREMENTS:

1. DIELECTRIC STRENGTH: THE SOCKET SHALL WITHSTAND WITHOUT FAILURE,A POTENTIAL OF 500 VOLTS r.m.s. 50/60 Hz APPLIED BETWEEN MUTUALLY INSULATED METAL PARTS FOR ONE MINUTE
2. INSULATION RESISTANCE: INSULATION RESISTANCE BETWEEN INSULATED METAL PARTS SHALL BE 100 MEGOHMS OR MORE AT INITIAL AND 50 MEGOHM OR MORE AFTER COLD TEST,HOT TEST,AND HUMIDITY TEST WHEN MEASURED WITH A 500 VOLTS D.C INSULATION RESISTANCE METER
3. CONTACT RESISTANCE: CONTACT RESISTANCE SHALL BE LESS THAN 50 MILLIOHMS AT INITIAL AND 100 MILLIOHMS AFTER LIFE TEST BETWEEN A TERMINAL OF THE SOCKET AND THAT OF THE MATING PLUG;LESS THAN 30 MILLIOHMS AT INITIAL AND 60 MILLIOHMS AFTER LIFE BETWEEN TERMINAL OF THE SOCKET IN A CLOSED CIRCUITED,WHEN MEASURED AT A CURRENT OF LESS THAN 100 MILLIAMPERE 1 KHz. THE MATING PLUG USED SHALL BE CLEANED AND FREE FROM OXIDATION FILM OF THE SURFACE.

E. MECHANICAL REQUIREMENT:

1. INSERTION AND WITHDRAWAL FORCE: THE INSERTION FORCE AND WITHDRAWAL FORCE SHALL BE 0.3-3 Kgs AT INITIAL AND 0.1-2 Kgs AFTER LIFE TEST WITH THE GAUGE PLUG
2. TERMINAL STRENGTH: THE TERMINAL SHALL BE CAPABLE OF WITHSTANDING A FORCE OF 500 GRAM APPLIED IN ANY DIRECTIONS FOR 10 SECOND WITHOUT LOOSING AND BREAKDOWN

F. SOLDERING TEST:

1. SOLDERABILITY TEST: a) TEST CONDITION:
   SOLDER TIME: 2 SECONDSINS
   SOLDER TEMP: 240℃±5℃
   FLUX: NEUTRAL FLUX
   b) REQUIREMENT: 95% COVERAGE OF SOLDER ON LEAD
2. RESISTANCE TO SOLDERING HEAT TEST: THE TERMINAL OF THE SOCKET SHALL BE DIPPED IN MOLTEN SOLDER FOR 5±0.5 SECOND AT TEMPERATURE OF 240℃±5℃ BETWEEN THE TIP OF THE TERMINAL AND THE COPPER SURFACE OF 0.8 MILLIMETER THICKNESS PC BOARD USED.AT THE CONCLUSION OF THIS TEST,THE SOCKET SHALL NOT SHOWN REMARKABLE FAILURE

G. ENDURANCE:

LIFE TEST: THE LIFE TEST SHALL BE CONSIST OF 5,000 CYCLES OF INSERTION AND WITHDRAWAL WITH THE MATING PLUG COVERED WITH A THIN COAT OF GREASE IN ORDER TO PREVENT FROM HEATING OF WEARING,AT A RATE OF 24 CYCLES PER MINUTES UNDER NO OR RATED LOAD.

H. ENVIRONMENTAL:

1. HEAT TEST: THE SOCKET SHALL BE IN THE TESTING CHAMBER AT A TEMPERATURE OF 85 ℃±2℃ AND THE RELATIVE HUMIDITY OF LESS THAN 50%RH FOR 96 HOURS AND THEN PLACED IN AMBIENT TEMPERATURE FOR MORE THAN 30 MINUTES RECOVERY PERIOD. THE RELATIVE TEST BEFORE AND AFTER THIS TEST SHOULD COMPLIED WITH PARAGRAPH D.2.
2. COLD TEST: THE SOCKET SHALL BE PLACED IN THE TESTING CHAMBER AT A TEMPERATURE OF -35℃±2℃ AND THE RELATIVE HUMIDITY OF LESS THAN 50% RH FOR 96 HOURS AND THEN PLACED IN AMBIENT TEMPERATURE FOR MORE THAN 30 MINUTES RECOVERY PERIOD. THE RELATIVE TEST BEFORE AND AFTER THIS TEST SHOULD COMPLIED WITH PARAGRAPH D.2.
3. HUMIDITY TEST: THE SOCKET SHALL BE PLACED IN THE TESTING CHAMBER AT A CONDITION OF -40℃±2℃ AND THE RELATIVE HUMIDITY OF 90% TO 95%RH FOR 96 HOURS THE DEW DROPS ON THE SURFACE OF SOCKET AND PLACED IN AMBIENT TEMPERATURE FOR MORE 30 MINUTES RECOVERY PERIOD. THE RELATIVE TEST BEFORE AND AFTER THIS TEST SHOULD COMPLIED WITH PARAGRAPH D.2.

I. MEASURING CONDITION:

ALL MEASUREMENTS AND TEST SHALL BE MADE AT A TEMPERATURE 10 ℃ TO 35℃ WITH A RELATIVE HUMIDITY 45%RH TO 85%RH UNDER STANDARD ATMOSPHERIC PRESSURE UNLESS OTHERWISE SPECIFIED CONDITIONS

J. OPERATING TEMP:

-25℃ TO +85℃

K. AMENDMENT:

THE MANUFACTURE RESERVE THE RIGHT TO ADJUST OR MODIFY TO THE PRODUCTS WHICHEVER THE MANUFACTURER FIND NECESSITY FOR THE IMPROVEMENT ON THE PRODUCTS CONCERED

ECN#	DATE	SYM	REVISION RECORD	AUTH	BY
07-265	05/17/07	B	REVISED RDI P/N TO RSJ-10X-SERIES-NL	VF	JY
05-599	11/30/05	A	CHANGED THE PRINT:SEE VOID COPY	VC	JY

PROJECTION

SCALE N/A

TOLERANCE EXCEPT AS NOTED

DEC. MILLIMETERS N/A

DEC. INCHES N/A

ANG. N/A

RDI Research Develop Innovate

RDI, Inc. 400 Columbus Avenue Valhalla, NY 10595

TITLE: 3.5mm STERO JACK-RoHS COMPLIANT

DR.	DATE	REF.	SHEET
JOEY	07/25/02	P/N: RSJ-10X-SERIES-NL	2 OF 2

CK.	PRE-	DRAWING NO.	SIZE	REV.
S.L.	JK	0774	F	B

THIS DOCUMENT IS OWNED BY, AND THE INFORMATION CONTAINED IN IT IS PROPRIETARY TO, RDI, BY RECEIPT HEREOF THE HOLDER AGREES NOT TO USE THE INFORMATION AND NOT TO DISCLOSE IT TO ANY THIRD PARTY, NOR REPRODUCE THIS DOCUMENT WITHOUT THE WRITTEN CONSENT OF RDI, AND AGREES TO RETURN THIS DOCUMENT FORTHWITH UPON REQUEST.