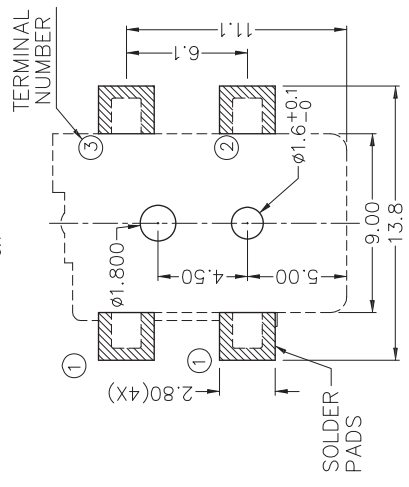
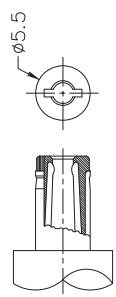
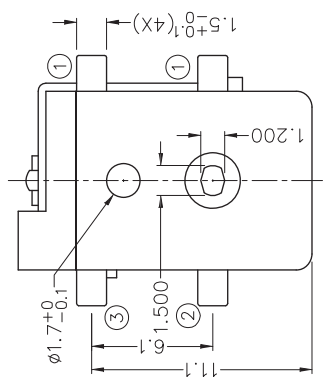


*MATERIAL:
 CENTRE PIN: COPPER
 TERMINAL 1: BRASS
 TERMINAL 2: COPPER ALLOY
 TERMINAL 3: BRASS
 COVER : PA6T
 HOUSING : PA6T



MODEL NO.	TDC-016H
SCHEMATIC	
CENTER PIN	ø2mm ø2.5mm

A DETAIL COPLANARITY



DC MATE PLUG

NOTE: ALL DIMS ARE GIVEN IN mm

Research Develop Innovate

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PROJECTION

TITLE		DC POWER JACK, TYPE C	
DR.	ø2.0/ø2.45 CLASS 4, WITH POST-ROHS COMPLIANT	DATE	1/23/02
REF.	RDJ-0210X-CSMT-NL	PRE-CHK.	JK
S.I.	JK	SIZE	F
DRAWING NO.	0616	REV.	C

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ECN#	DATE	SYM	AUTH	BY
11-043	03/29/11	C	GM	AL
06-051	01/25/06	B	VF	JY
02-037	2/21/02	A	BM	JY

REVISION RECORD

SCALE	TOLERANCE	EXCEPT AS NOTED	DEC. MILLIMETERS
NONE	0.0 ±0.2	0.00 ±0.1	0.000 ±0.05
ANG.	N/A		

GM	AL	VF	BM	JY

CHANGE THE DRAWING TO NEW PRINT
 CHANGED THE PART TO ROHS COMPLIANT
 ADDED A DWG FOR SOP OF TAPE AND REEL PACKAGE

SPECIFICATION

TITLE	STATUS	SPEC. NO.	DATE	PAGE
DC POWER JACK, TYPE C Ø 2.0/Ø 2.45 CLASS 4, WITH POST-ROHS COMPLIANT	GENERAL	RDJ-0210X-CSMT-NL	1/23/02	1

1. GENERAL SCOPE
 THIS SPECIFICATION COVERS THE GENERAL REQUIREMENTS OF THE DC POWER JACK, CLASS 4, USED ON AUDIO SYSTEMS AND OTHER RELATED ELECTRONIC APPARATUS.
 THIS SPECIFICATION APPLIES TO THE NORMAL PLASTIC FOR REFLOW SOLDERING PROCESS.

MATING PLUG
 THE MATING PLUG SHOULD COMPLY WITH STANDARD PLUG AS SHOWN IN THE DRAWING ATTACHED.

2. MECHANICAL
 2a. TERMINAL STRENGTH
 THE TERMINALS SHALL BE CAPABLE OF WITHSTANDING A FORCE OF 500 GRAMS APPLIED IN ANY DIRECTION FOR 10 SECONDS WITHOUT LOOSENING OR BREAKDOWN, EXCEPT BENDING OF THE TERMINALS.

2b. INSERTION AND EXTRACTION FORCE
 INSERTION FORCE

CONDITIONS	VALUE OF SPEC.
INITIAL CONDITION	0.3 Kgs TO 2.0 Kgs
AFTER LIFE TEST	
AFTER HUMIDITY TEST	
AFTER HEAT TEST	0.2 Kgs TO 2.0 Kgs
AFTER COLD TEST	
AFTER RESISTANCE TO SOLDERING HEAT TEST	

EXTRACTION FORCE

CONDITIONS	VALUE OF SPEC.
INITIAL CONDITION	0.3 Kgs TO 2.0 Kgs
AFTER LIFE TEST	
AFTER HUMIDITY TEST	
AFTER HEAT TEST	0.2 Kgs TO 2.0 Kgs
AFTER COLD TEST	
AFTER RESISTANCE TO SOLDERING HEAT TEST	

3. ELECTRICAL
 3a. WITHSTAND VOLTAGE TEST
 500 VOLTS AC/RMS OF COMMERCIAL FREQUENCY 50 TO 60 Hz APPLIED BETWEEN ADJACENT OPEN TERMINALS FOR 1 MINUTE WITHOUT BREAKDOWN.

3b. INSULATION RESISTANCE
 THE INSULATION RESISTANCE BETWEEN MUTUAL INSULATED CONTACTS SHOULD COMPLIED WITH FOLLOWING SPECIFICATION UNDER 500 VOLTS DC (METHOD C UNLESS OTHERWISE SPECID)

ECN#	DATE	SYM	REVISION RECORD	AUTH
11-043	03/29/11	C	CHANGE THE DRAWING TO NEW PRINT	GM
06-051	01/25/06	B	CHANGED THE PART TO ROHS COMPLIANT	VF
02-037	2/21/02	A	ADDED A DWG FOR SOP OF TAPE AND REEL PACKAGE	BM
				BY

CONDITION	VALUE OF SPEC.
INITIAL CONDITION	
AFTER LIFE TEST	
AFTER HEAT TEST	100 M Ohm MIN.
AFTER COLD TEST	
AFTER RESISTANCE TO SOLDERING HEAT TEST	
AFTER HUMIDITY TEST	50 M Ohm MIN.

NOTE: THE MATED PLUG USED FOR THIS MEASUREMENT SHALL BE CLEANED TO REMOVE OXIDATION FILM ON THE SURFACE BEFORE TEST.

3c. CONTACT RESISTANCE
 CONTACT RESISTANCE OF JACK SHALL NOT EXCEED THE VALUE DEFINED IN THE TABLE LISTED AT A CURRENT LESS THAN 1.0amp. DC BY FOUR TERMINALS METHOD.



CONDITIONS	VALUE OF SPEC.	
	PLUG TO CONTACTS	PLUG TO SHUNT
INITIAL CONDITION		
AFTER HUMIDITY TEST		
AFTER HEAT TEST	50 m Ohm MAX.	30 m Ohm MAX.
AFTER COLD TEST		
AFTER RESISTANCE TO SOLDERING HEAT TEST		
AFTER DURABILITY TEST	100 m Ohm MAX.	60 m Ohm MAX.


NOTE: THE MATED PLUG USED TO THIS MEASUREMENT SHALL BE CLEANED TO REMOVE OXIDATION FILM ON THE SURFACE BEFORE TEST.

4. ENDURANCE
 DURABILITY TEST
 THE DURABILITY TEST SHALL CONSIST OF 5000 INSERTION & EXTRACTION MATING CYCLES WITH THE MATING PLUG OR THE GAUGE PLUG AT A RATE 10-20 CYCLES PER MINUTE, NO LOAD CONDITION, WITH OR WITHOUT LUBRICANT WHICH SHOULD BE SPECIFIED IN THE DETAIL REQUIREMENT. THE PERFORMANCE OF THE JACK BEFORE AND AFTER THIS TEST SHOULD COMPLY WITH PARAGRAPHS 2b AND 3c.

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

- NOTES:
 (1) FOR DC POWER JACK SEE SHEET 1 OF 4
 (2) FOR PAGE 2 OF SPECS. SEE SHEET 3 OF 4
 (3) FOR PACKING SEE SHEET 4 OF 4

			
SCALE	N/A	TITLE	DC POWER JACK, TYPE C
TOLERANCE EXCEPT AS NOTED	N/A	DR. REF.	Ø2.0/Ø2.45 CLASS 4, WITH POST-ROHS COMPLIANT
DEC. INCHES	N/A	DATE	1/23/02
DEC. MILLIMETERS	N/A	PRE-CHK.	JK
ANG.	N/A	DRAWING NO.	RDJ-0210X-CSMT-NL
		SIZE	2 DF 4
		REV.	C


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SPECIFICATION

TITLE	STATUS	SPEC. NO:	DATE	PAGE
DC POWER JACK, TYPE C Ø 2.0/Ø 2.45 CLASS 4, WITH POST-ROHS COMPLIANT	GENERAL	RDJ-0210X-CSMT-NL	1/23/02	1

5. ENVIRONMENT

5a. HUMIDITY TEST
 THE JACK SHALL BE PLACED IN THE TESTING CHAMBER AT THE CONDITION OF 40°C±2°C AND THE RELATIVE HUMIDITY OF 90% TO 95% RH FOR 96 HRS, THE DEW DROPS ON THE SURFACE OF JACK SHALL BE BLOWN OFF AND REMOVED FROM THE SURFACE OF JACK AND THEN PLACED IN AMBIENT TEMPERATURE FOR MORE THAN A 30 MINUTES, RECOVERY PERIOD. THE RELATIVE TEST BEFORE AND AFTER THIS TEST SHOULD COMPLY WITH PARAGRAPH 3a AND 3b.

5b. HEAT TEST
 THE JACK SHALL BE PLACED IN THE TESTING CHAMBER AT A TEMPERATURE OF 70°C±2°C AND A RELATIVE HUMIDITY OF LESS THAN 50%RH FOR 96 HRS, AND THEN PLACED IN AMBIENT TEMPERATURE FOR MORE THAN A 30 MINUTES, RECOVERY PERIOD. THE RELATIVE TEST BEFORE AND AFTER THIS TEST SHOULD COMPLY WITH PARAGRAPH 3c.

5c. COLD TEST
 THE JACK SHALL BE PLACED IN THE TESTING CHAMBER AT A TEMPERATURE OF -40°C±2°C AND A RELATIVE HUMIDITY OF LESS THAN 50%RH FOR 96 HRS, AND THEN PLACED IN AMBIENT TEMPERATURE FOR MORE THAN A 30 MINUTES, RECOVERY PERIOD. THE RELATIVE TEST BEFORE AND AFTER THIS SHOULD COMPLY WITH PARAGRAPHS 2b AND 3c.

6. SOLDERING TEST

6a. SOLDER ABILITY
 THE TERMINAL OF JACK TESTED SHALL BE DIPPED INTO SOLDERING FLUX OR EQUIVALENT FOR A PERIOD OF 5 TO 10 SECTIONS AND THEN IMMERSED INTO MOLTEN SOLDER Sn63, AT A CONTROLLED TEMPERATURE OF 240°C±5°C FOR 3 ± 0.5 SECTIONS AFTER AGING THE COVERAGE SHOULD MORE THAN 95% BY THE MICROSCOPE OF MORE THAN 10X.

6b. RESISTANCE TO SOLDERING HEAT
 THE JACK SHOULD BE IMMERSED INTO MOLTEN SOLDER, Sn63, AT A CONTROLLED TEMPERATURE OF 240°C±5°C FOR 30 ± 1 SECONDS, THE RELATIVE TEST AFTER THIS TEST SHOULD COMPLIED WITH PARAGRAPH 2b AND 3c. THE OUTLOOK OF THE JACK SHOULD HAVE NO REMARKABLE DETERIORATION.

7. OPERATING TEMPERATURE
 THE RANGE: -25 °C TO +85 °C

8. RATING
 RATED VOLTAGE: 24 VOLTS DC
 RATED CURRENT: 3.5 AMPERE DC
 14.0 AMPERE DC

9. MATERIAL AND FINISH

ITEM	MATERIAL	COLOR	PLATING	REMARK
PLASTIC HOUSING<P1>	POLYAMIDE	BLACK		UL94V-0
PLASTIC COVER <P2>	POLYAMIDE	BLACK		UL94V-0
SPRING CONTACT<M1>	PBS		Ag	30T
SHUNT TERMINAL<M2>	BRASS		Ag	40T
PIN CONTACT<M3>	BRASS		Ag	30T
CENTER PIN<M4>	COPPER ALLOY		NICKEL	Ø2.0 / Ø2.5

10. PART NUMBER:
 WITH TWO POSTS (TYPE "C")
 CENTER PIN<2.00Ø>: RDJ-0210A-CMST
 CENTER PIN<2.45Ø>: RDJ-0210B-CMST

REMARK
 THIS SPECIFICATION CHANGE TO TIN PLATING ON ALL TERMINALS BASED ON CUSTOMER'S INQUIRY TO HAVE BETTER SOLDERING PERFORMANCE, WAS SILVER.

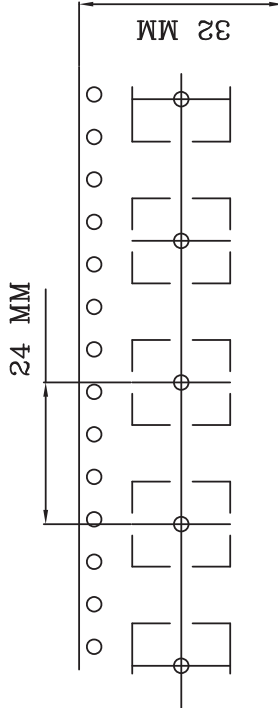
PROJECTION			
SCALE	N/A	TITLE	DC POWER JACK, TYPE C
TOLERANCE EXCEPT AS NOTED	N/A	DR. REF.	Ø2.0/Ø2.45 CLASS 4, WITH POST-ROHS COMPLIANT
DEC. INCHES	N/A	DATE	1/23/02
DEC. MILLIMETERS	N/A	PRE-CHK.	JK
ANG.	N/A	DRAWING NO.	0616
		SIZE	F
		REV.	C

		Research Develop Innovate	
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GM	AL	BY	BY
VF	JY	BM	JY
CHANGE THE DRAWING TO NEW PRINT		REVISION RECORD	
CHANGED THE PART TO ROHS COMPLIANT		AUTH	
ADDED A DWG FOR SOP OF TAPE AND REEL PACKAGE		AUTH	
ECN#	DATE	SYM	

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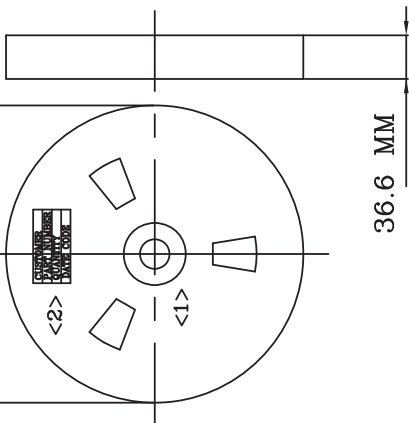
DWG. NO. JK-0616-F REV. "C" PART NO.: RDJ-0210X-CSMT-NL

A: CARRIER SIZE



- 1) DETAIL SIZES REFERENCE: EIA-481.
- 2) SPEC: 32 MM + 24 MM.
- 3) COVER TAPE: SPEC. ATTACHED(CONDUCTIVE)

B: REEL SIZE



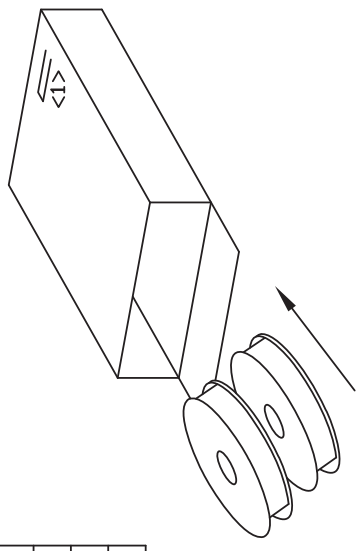
- 1) REFERENCE: EIA-481
- 2) LABELING

CUSTOMER
PART NUMBER
QUANTITY
DATE CODE
- 3) QUANTITY: 250 PCS/REEL
- 4) MAT'L: POLYMER

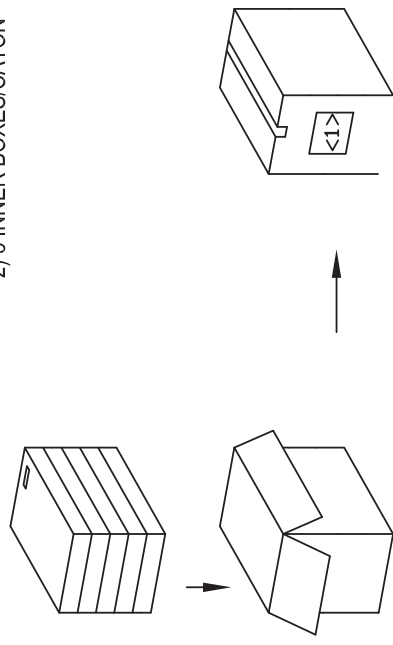
C: INNER BOX

- 1) LABELING

CUSTOMER
PART NUMBER
QUANTITY
DATE CODE
- 2) 2 REELS/INNER BOX



D: CARTON



- 1) SHIPPING MARK
- 2) 5 INNER BOXES/CATON

NOTE:

FOR DC POWER JACK, TYPE C SEE SHEET 1/4.

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

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TITLE	DC POWER JACK, TYPE C	DR. REF.	DATE	REV.	SHEET
DR. REF.	RDJ-0210X-CSMT-NL	DATE	1/23/02	REV.	2 OF 4
CK.	S.L. JK	PRE-DRAWING NO.	0616	SIZE	REV. C
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