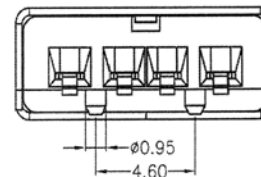
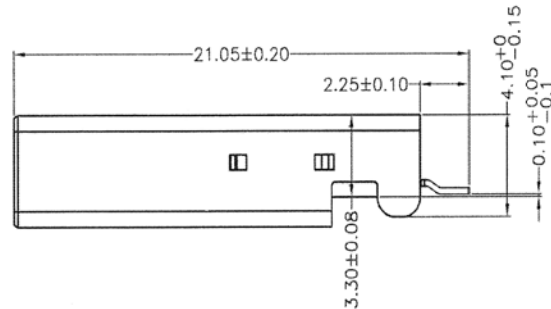
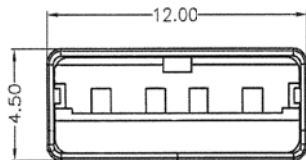


P.C.B LAYOUT(TOL±0.05mm)
TOP VIEW




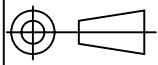
SPECIFICATION:

1. MATERIAL:
 - 1.1 PLASTIC CORE: LCP+30%GF, BLACK, UL94-V0
 - 1.2 TERMINAL: BRASS, CONTACT THICKNESS=0.25mm
 - 1.3 SHELL: SPCC(STEEL) WITH NI-PLATING, THICKNESS=0.30mm
 - 1.4 ALL MATERIAL ARE RoHS COMPLIANT
2. ELECTRICAL CHARACTERISTICS:
 - 2.1 DIELECTION WITHSTANDING VOLTAGE: AC 500V/0.5mA/60s
 - 2.2 INSULATION RESISTANCE: DC 500V/10000M OHM(MIN.)
 - 2.3 CONTACT RESISTANCE: 30m OHM MAX.
 - 2.4 TEMPERATURE: -30°C-85°C
 - 2.5 EXTRACTION FORCE: 10 NEWTONS MINIMUM
 - 2.6 INSERTION FORCE: 35 NEWTONS MAXIMUM

ORDERING INFO:

- EX. ORDER NUMBER: UPAR70- 4 K 5 J 1 0 - F - NL
 REFERENCE NUMBER: 1 2 3 4 5 6 7 8 9
 1. PRODUCTION CODE: UPAR70 ==MALE, R/A SMT TYPE
 2. POSITIONS: 4==4 POSITIONS
 3. COLOR OF INSULATOR: K= BLACK
 4. CONTACT PLATING: 5= 30u" GOLD PLATING
 5. SHELL PLATING & LOGO: J= Ni W/O LOGO
 6. THE MATERIAL OF INSULATION: 1= LCP+30%GF, BLACK, UL94-V0
 7. POST DIM: 0=Ø0.95
 8. F= FLUSH TAB
 9. NL=RoHS COMPLIANT

NOTE: ALL DIMS ARE IN mm

PROJECTION		 Research Develop Innovate RDI, Inc. 333 North Bedford Road, Suite 135, Mount Kisco, NY 10549	
	SCALE	TITLE	
	N/A	USB CONNECTOR, 4 POSITION, SMT TYPE, FLUSH SHIELD TAB-RoHS COMPLIANT	
TOLERANCE EXCEPT AS NOTED	DR. LUCIA	DATE 04/20/05	REF. P/N: UPAR704K5J10F-NL
DEC. MILLIMETERS	CK. JY	PRE- CD	DRAWING NO. 2422
.X±0.25		SIZE F	SHEET 1 OF 3
.XX±0.15		REV. I	
.XXX±0.05		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.	
ANG. X±5.0°			
.XX±3.0°			
.XXX±2.0°			

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07-262	05/15/07	G	REVISED THE SHELL MATERIAL COLD ROLL STEEL TO BRASS	BILL	JY
06-500	07/21/06	F	CHANGED THE PART TO RoHS COMPLIANT&REVISED P/N&ADDED ITEM 9	BM	JY
06-337	05/10/06	E	ADDED THE SPECIFICATION	MY	JY
06-332	05/08/06	D	REVISED P.C.B PATTERN LAYOUT DIMS:SEE DRAWING	MY	JY

1.0 SCOPE:

THIS SPECIFICATION COVERS THE REQUIREMENTS FOR PRODUCT PERFORMANCE AND TEST METHODS OF JDJ'S USB CONNECTORS OF THE PART NUMBERS SPECIFIED AS BELOW PRODUCT SHALL BE OF THE DESIGN, STRUCTURE AND PHYSICAL DIMENSIONS SPECIFIED IN THE APPLICABLE PRODUCT DRAWING.

2.0 RATING:

- 2.1 VOLTAGE RATING: 150V AC
- 2.2 CURRENT RATING: 1.5AMPS
- 2.3 OPERATION TEMPERATURE RANGE: -0°C TO +50°C
- 2.4 STORAGE TEMPERATURE RANGE: -20°C TO +60°C
- 2.5 OPERATION RELATIVE HUMIDITY: 95% MAXIMUM(NON-CONDENSING)

3.0 TEST CONDITION:

ALL TESTS SHALL BE PERFORMED AS BELLOW CONDITIONS UNLESS OTHERWISE SPECIFIED

- 3.1 TEMPERATURE RANGE: +15°C TO +35°C
- 3.2 HUMIDITY RANGE: 25% TO 85%
- 3.3 ATMOSPHERIC PRESSURE: 86kPa TO 106kPa(860 TO 1060MMBER)

4.0 MATERIAL AND FINISH

- 4.1 HOUSING
 - 4.1.1 HIGH TEMP. THERMOPLASTIC, BLACK, UL94V-0 RATING)
- 4.2 TERMINAL:
 - 4.2.1 COPPER ALLOY
- 4.3 SHELL:
 - 4.3.1 STEEL
- 4.4 TERMINAL FINISHING:
 - 4.4.1 GOLD PLATED ON THE CONTACT AREA, AND TIN PLATED ON THE SOLDER TAIL, AND NICKEL UNDERPLATED OVERALL

5.0 TEST METHODS AND REQUIREMENTS

5.1 EXAMINATION OF PRODUCT:

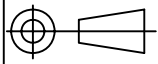
No.	TEST DESCRIPTION	TEST METHODS	REQUIREMENT
5.1.1	EXAMINATION OF PRODUCT (OUTWARD APPEARANCE STRUCTURE)	EIA 364-18 SHALL BE CONFIRMED WITH EYES IN ACCORDANCE WITH EACH DRAWING, SHALL BE CONFIRMED BY USING PROPER MEASURING INSTRUMENTS	1) OUTWARD APPEARANCE SHALL BE GOOD WITHOUT SUCH INJURIOUS PROBLEM 2) STRUCTURE SHALL BE MEET THE DESIGN AND DIMENSIONAL REQUIREMENTS OF DRAWING

5.2 ELECTRICAL PERFORMANCE:

5.2.1	LOW LEVEL CONTACT RESISTANCE	EIA 364-23 SUBJECT MATED CONTACTS ASSEMBLED IN HOUSING TO 20mV MAXIMUM OPEN CIRCUIT AT 100mA MAXIMUM	30m OHM MAXIMUM
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No.	TEST DESCRIPTION	TEST METHODS	REQUIREMENT
5.2.2	INSULATION RESISTANCE	EIA 364-21 TEST SEPARATELY BETWEEN THE CLOSEST ADJACENT CONTACTS BY PAIRS AND BETWEEN THE SHELL AND THE CONTACTS WHICH CLOSEST TO THE SHELL AT 500VDC FOR 1 MINUTE	1) INITIAL: 1000M OHM MINIMUM 2) AFTER TEST: 1000M OHM MINIMUM
5.2.3	DIELECTRIC WITHSTANDING VOLTAGE	EIA 364-20 TEST SEPARATELY BETWEEN THE CLOSEST ADJACENT CONTACTS BY PAIRS AND BETWEEN THE SHELL AND THE CONTACTS WHICH CLOSEST TO THE SHELL AT 500VDC FOR 1 MINUTE	1) NO FLASHOVER OR INSULATION BREAKDOWN 2) LEAKAGE CURRENT: 0.5mA MAXIMUM
5.3 MECHANICAL PERFORMANCE:			
5.3.1	CONNECTOR MATING FORCE	EIA 364-13 SHALL BE MEASURED WITH TENSION GAUGE OR TENSION TESTER MEASURE FORCE NECESSARY TO MATE ASSEMBLIES AT MAXIMUM RATE OF 12.5mm(OR 0.492") PER MINUTE.	1) INITIAL: 35N MAX. 2) AFTER TEST: 35N MAX.
5.3.2	CONNECTOR UNMATING FORCE	EIA 364-13 SHALL BE MEASURED WITH TENSION GAUGE OR TENSION TESTER MEASURE FORCE NECESSARY TO MATE ASSEMBLIES AT MAXIMUM RATE OF 12.5mm(OR 0.492") PER MINUTE.	1) INITIAL: 10N MIN. 2) AFTER TEST: 10N MIN.
5.3.3	DURABILITY	EIA 364-09 MATE AND UNMATE CONNECTOR ASSEMBLIES FOR 1500 CYCLES AT MAXIMUM RATED OF 200 CYCLES PER HOUR	1) SHALL MEET VISUAL REQUIREMENT, SHOW NO PHYSICAL DAMAGE
5.3.4	PHYSICAL SHOCK	EIA 364-27 SUBJECT MATED CONNECTORS TO 50G'S HALF-SINE SHOCK PULSE OF 11ms DURATION. THREE SHOCKS IN EACH DIRECTION APPLIED ALONG THREE MUTUALLY PERPENDICULAR PLANES, 18 TOTAL SHOCK	1) NO DISCONTINUTLES OF 1um SEC OR LONGER DURATION 2) SHALL MEET VISUAL REQUIREMENT, SHOW NO PHYSICAL DAMAGE

PROJECTION




SCALE: N/A

TOLERANCE EXCEPT AS NOTED: .XX:±0.15 .XXX:±0.05

DEC. MILLIMETERS: .X±0.25 .XX:±0.15 .XXX:±0.05

ANG. X:±5.0° .XX:±3.0° .XXX:±2.0°



Research Develop Innovate

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

TITLE: USB CONNECTOR, 4 POSITION, SMT TYPE, FLUSH SHIELD TAB-ROHS COMPLIANT


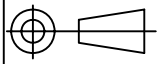
DR. LUCIA	DATE: 04/20/05	REF. P/N: UPAR704K5J10F-NL	SHEET: 2 OF 3
CK. JY	PRE-CD	DRAWING NO. 2422	SIZE: F

REV. I

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06-337	05/10/06	E	ADDED THE SPECIFICATION	MY	JY
06-332	05/08/06	D	REVISED P.C.B PATTERN LAYOUT DIMS:SEE DRAWING	MY	JY

No.	TEST DESCRIPTION	TEST METHODS	REQUIREMENT
5.3.5	RANDOM VIBRATION	EIA 364-28 TEST CONDITION V TEST LETTER A NO DISCONTINUITIES OF 1 us OR LONGER DURATION WHEN MATED USB CONNECTORS ARE SUBJECTED TO 5.35Gs RMS. 15 MINUTES IN EACH OF THREE MUTUALLY PERPENDICULAR PLANES	1) NO DISCONTINUITIES OF 1um SEC OR LONGER DURATION 2) SHALL MEET VISUAL REQUIREMENT, SHOW NO PHYSICAL DAMAGE
5.4 ENVIRONMENTAL PERFORMANCE:			
5.4.1	THERMAL SHOCK	EIA 364-32 TEST CONDITION 1 10 CYCLES -55°C AND +85°C. THE USB CONNECTORS UNDER TEST MUST BE MATED	SHALL MEET VISUAL REQUIREMENT, SHOW NO PHYSICAL DAMAGE
5.4.2	HUMIDITY LIFE	EIA 364-31 TEST CONDITION A METHOD III SUBJECT MATED CONNECTORS TO 168 HOURS(SEVEN COMPLETE CYCLES)	SHALL MEET VISUAL REQUIREMENT, SHOW NO PHYSICAL DAMAGE
5.4.3	SOLDERABILITY	EIA 364-52 AFTER 1 HOUR ±5 MINUTES STEAM AGING TEMPERATURE: 230±5° TIME: 5±0.5 SECONDS	ALL TERMINATIONS SHALL EXHIBIT A CONTINUOUS SOLDER COATING WHIT 95% COVERAGE
5.4.4	RESISTANCE TO SOLDERING HEAT	MIL-STD-202 METHOD 210A PLACE THE CONNECTOR ON THE P.C.BOARD, THEN IMMERSE THE SOLDER PIN UP TO THE SURFACE OF THE BOARD IN THE SOLDER BATH AT 260±5°C FOR 10 SECONDS	SHALL MEET VISUAL REQUIREMENT, SHOW NO PHYSICAL DAMAGE
5.4.5	SALT SPRAY	MIL-STD-1344A METHOD 1001 TEST CONDITION B NaCl SOLUTION CONCENTRATION: 5% MAX PH=6.5~7.2 TEMPERATURE: 35±1°C TEST TIME: 12 HOURS	SHALL MEET VISUAL REQUIREMENT, SHOW NO PHYSICAL DAMAGE

PROJECTION		 RDI Research Develop Innovate RDI, Inc. 333 North Bedford Road, Suite 135, Mount Kisco, NY 10549	
		SCALE N/A TOLERANCE EXCEPT AS NOTED DEC. MILLIMETERS .X±0.25 .XX±0.15 .XXX±0.05 ANG. X±5.0° .XX±3.0° .XXX±2.0°	
TITLE		USB CONNECTOR, 4 POSITION, SMT TYPE, FLUSH SHIELD TAB-ROHS COMPLIANT	
DR. LUCIA	DATE 04/20/05	REF. P/N: UPAR704K5J10F-NL	SHEET 3 OF 3
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