



SCHEMATIC DIAGRAM

**UNLESS OTHERWISE SPECIFIED,
TOLERANCE ON DECIMAL: ±0.3**

T: 1.6 Dimensions of PC board holes
Tolerance : ±0.05 (Printed-Top view)

NOTE: ALL DIMS ARE IN mm.

4	GROUND CONTACT	1	C2680	Cu/Sh PLATED
3	CONTACT FOOT	7	C5191	Ag PLATED
2	COAT	1	C2680	Cu/Sh PLATED
1	HOUSING	1	PBT 4815	UL-94V0 (BLACK COLOR)
NO.	DESCRIPTION	QTY	MATERIAL	PLATING & COLOR

PROJECTION



Research Develop Innovate

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

SCALE

UNDEFINED

TOLERANCE EXCEPT AS NOTED

DR. JIN DATE 08/15/06 P/N: MDJ7PS-NL

DEC. MILLIMETERS .XX±0.25 .XXX±0.35

PRE. JIN DRAWING NO. 2937 SIZE F

ANG. XXX±0.2°

MINIATURE DIN CONNECTOR-ROHS COMPLIANT SHEET 1 OF 3

18-067	06/29/18	A	REVISE THE VIEW OF THE PRODUCT	VF	Tina
ECN#	DATE	SYM	REVISION RECORD	AUTH	BY

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1. TECHNICAL

- 1-1 INSERTION FORCE: 0.8 ~ 5Kg.
 1-2 WITHDRAWAL FORCE: 0.8 ~ 4Kg.
 1-3 SINGLE CONTACT MAINTENANCE FORCE: 20g MIN.
 1-4 CONTACT PULL-OUT STRENGTH.
 ANY CONTACT SHALL WITHSTAND A STEADY STRAIGHT PULL OF 2kg IN THE DIRECTION OF CONTACT BREAK-OUT FOR 20 SECONDS WITHOUT SEPARATION(PULL-OUT).

2. ELECTRICAL

- 2-1 CURRENT CARRYING CAPACITY: AC 100V 1A MAX.
 DC 12V 2A MAX.
 2-2 CONTACT RESISTANCE:
 TESTER CONDITIONS: ALTERNATING CURRENT OF ALMOST 20MA AND AT A FREQUENCY OF 1K Hz BY THE VOLTAGE DROP METHOD.
 2-2-1 INITIAL: BEFORE ANY TESTING

- PIN TO CONNECTOR: 30mOHM MAX.
 PLUG SHIELD TO CONNECTOR: 50mOHM MAX.
 2-2-2 AFTER ENVIRONMENTAL TEST AND LIFE CYCLE TEST
 (EXCEPT SALT SPRAYING WATER TEST)
 PIN TO CONTACTOR: 200mOHM MAX.
 PLUG SHIELD TO CONNECTOR: 500mOHM MAX.

- 2-3 INSULATION RESISTANCE:
 BETWEEN ANY ADJACENT OPEN CONTACTS SHALL NOT BE LESS THAN A VALUE AS SPECIFIED BELOW WITH A 250V DC INSULATION RESISTANCE TEST.
 2-3-1 BEFORE ENVIRONMENTAL TEST: 50MOHM MIN.
 2-3-2 AFTER ANY ENVIRONMENTAL TEST EXCEPT FOR MOISTURE TEST: 10MOHM MIN.
 2-3-3 AFTER MOISTURE TEST 1MOHM MIN.

- 2-4 DIELECTRIC STRENGTH:
 A POTENTIAL OF 250V AC RMS 50/60 Hz SHALL BE APPLIED BETWEEN ANY OPEN CONTACTS FOR ONE MINUTE WITHOUT BREAKDOWN.

3 LIFE CYCLE TEST

- CONNECTOR SHALL BE SUBJECT TO 5000CYCLES AT 10 TO 20 CYCLES PER MINUTE WITH NO ELECTRICAL LOAD
 3-1 INSERTION FORCE: 0.5 ~ 4.5Kg.
 3-2 WITHDRAWAL FORCE: 0.5 ~ 3.5Kg.
 3-3 SINGLE CONTACT MAINTENANCE FORCE: 10g MIN.

4 ENVIRONMENT PERFORMANCE

- 4-1 MOISTURE TEST
 AT 90%-95% RH 40°C± 2°C FOR 96 HOURS AND SHALL THEN BE CONDITIONS AT ROOM AMBIENT CONDITIONS FOR A PERIOD OF 1 TO 2 HOURS
 4-2 HEAT TEST
 AT -70°C± 2°C FOR 500 HOURS AND SHALL THEN BE CONDITION AT ROOM AMBIENT CONDITIONS FOR A PERIOD OF 1 TO 2 HOURS.
 4-3 COLD TEST
 AT -40°C± 3°C FOR 500 HOURS AND SHALL THEN BE CONDITION AT ROOM AMBIENT CONDITIONS FOR A PERIOD OF 1 TO 2 HOURS.
 4-4 SALT SPRAYING WATER TEST
 TEMPERATURE 35°C± 2°C SALT SOLUTION 5% BY WEIGHT FOR 48 HOURS.
 4-4-1 CONTACT RESISTANCE:
 PIN TO CONTACTOR: 10HM MAX.
 PLUG SHIELD TO CONNECTOR: 100HM MAX.

4-5 THERMAL SHOCK
 UNDER LIST IS 1 CYCLE.MAIE 5 CYCLES.

No.	TEMP	TIME (MIN)
1	-40°C± 3°C	30
2	ROOM AMBIENT CONDITIONS	5
3	70°C± 2°C	30
4	ROOM AMBIENT CONDITIONS	5

4-5-1 CONTACT RESISTANCE: SAME AS 4-4-1
 4-5-2 INSULATION RESISTANCE: 1MOHM MIN.

5 OTHERS

- 5-1 SHIPPING & STORAGE ENVIRONMENT: -40°C TO +80°C
 5-2 HEAT RESISTANCE TEST FOR WAVE SOLDERING
 THE CONNECTOR SHALL BE TESTED UNDER CONDITION AS SPECIFIED IN ITEMS (1) OR (2) OR (3) BELOW. SHALL NOT OCCUR REMARKABLE DETERIORATION OF THE PART CONSTRUCTED AND ELECTRICAL DAMAGE OR FAILURE TO THE EXTENT OF PRACTICAL USE. SHALL COMPLY WITH PARAGRAPHS 1-1, 1-2, 2-1, 2-2 AND 2-3.
 (1) CONDITION OF THE CONNECTOR FOR PRINTED CIRCUIT BOARD: THE CONNECTOR SHALL BE MOUNTED OR ATTACHED TO SPECIFIED THICKNESS COPPER FOIL CLAD PHENOLIC LAMINATED BOARD WITH A SUITABLE HOLE LAYOUT TO MEET TERMINAL ARRANGEMENT OF THE CONNECTOR TESTED. THE AREA TO BE SOLDERED OF THE TERMINAL SHALL BE IMMERSED INTO MOLEN SOLDER AT A TEMPERATURE OF 260°C± 3°C FOR A PERIOD OF 10 SECONDS
 (2) WAVE SOLDERING CONDITION: REFERENCE STANDARDS JIS J 0050.L0054

WAVE SOLDERING CONDITION:

PRETREATMENT	JEDEC LEAES:	30°C 60%RH 92 HOR 6°C 60%RH 40h
PREHEATING	TEMP: T1	100°C ~ 120°C
	TEMP: T2	120°C
	TIME: T1	40 SECS
SOLDERING	TEMP: T3	260°C ± 3°C
	TIME: T2	10 SECS
FREQUENCY		2 TIMES

PROJECTION



SCALE

UNDEFINED

TOLERANCE

EXCEPT AS NOTED

DEC. MILLIMETERS

.X±0.10

.XX±0.25

.XXX±0.35

.XXX±0.2*

.XXX±0.2*



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2 OF 3

PRE-

C □

DRAWING NO.

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