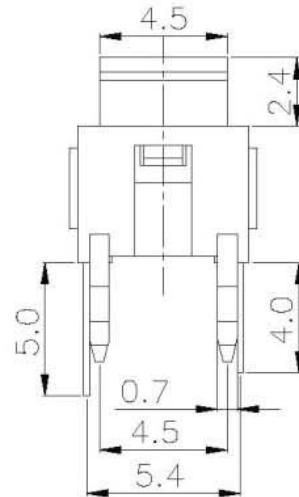
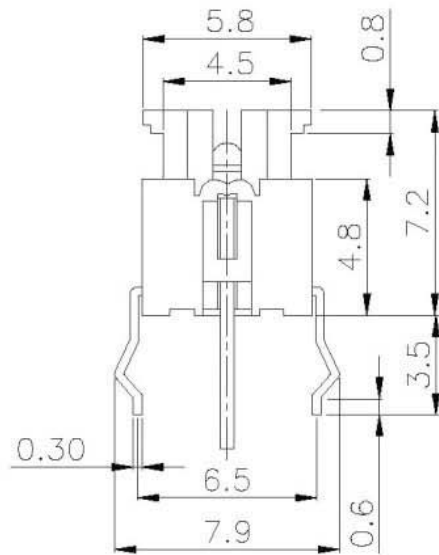
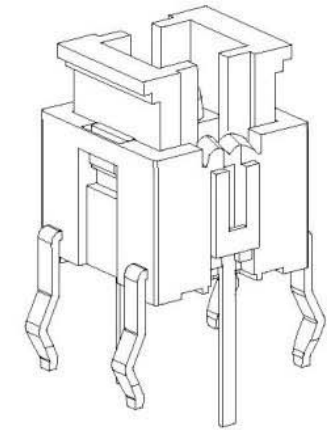
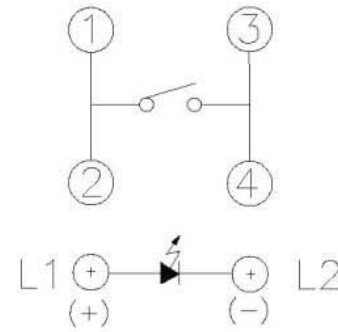
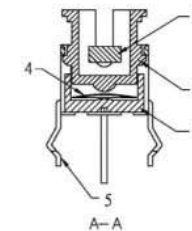
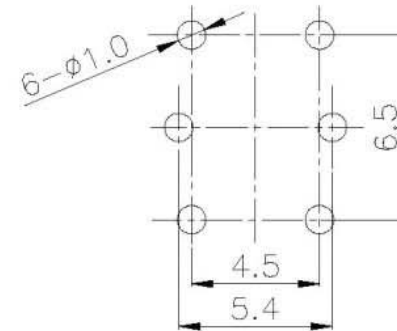


CIRCUIT



P.C.B.LAYOUT



LED COLOR			
1	2	3	4
RED	YELLOW	GREEN	BLUE

NO.	PART NAME	MATERIAL
1	BASE	PA66
2	KEYSTORE	PA66
3	LED	GaALAs
4	CONTACT	PBS(C5210-EH+Ag)
5	TERMINAL	C2680 PLATED Ag

NOTE: ALL DIMS ARE IN mm

Ordering Chart :TA07BL-X-NL

X=LED Color: Red, Yellow, Green, Blue

PROJECTION		<b>RDI</b> Research Develop Innovate RDI, Inc. 333 North Bedford Road, Suite 135, Mount Kisco, NY 10549	
SCALE N/A		TITLE Rohs Compliant Push Button Switch	
TOLERANCE EXCEPT AS NOTED	DR. Aris	DATE 04/14/11	REF. P/N: TA07BL-X-NL
DEC. MILLIMETERS 0.00±0.10 0.0±0.25 0±0.50	CK. MD	PRE- SW	DRAWING NO. 4064
ANG. 0.00°±0.5° 0.0°±1° 0°±2°		SIZE F	SHEET 1 OF 4
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ECN#	DATE	SYM	REVISION RECORD	AUTH	BY

1. GENERAL

- 1.1 ITEM NO.: TA-07
- 1.2 SWITCH RATINGS: 50mA 12VDC
- 1.3 OPERATION TEMPERATURE RANGE: -25°C~70°C
- 1.4 PRESERVATIVE TEMPERATURE RANGE: -30°C~80°C
- 1.5 APPEARANCE AND DIMENSIONS: SEE OUTSIDE DRAWING PAGE
- 1.6 STANDARD CONDITIONS: UNLESS OTHERWISE SPECIFIED, THE TEST AND MEASUREMENTS SHALL BE CARRIED OUT AS FOLLOWS:
  - 1-6-1 AMBIENT TEMPERATURE: 5~35°C
  - 1-6-2 RELATIVE HUMIDITY: 45~85% RH
  - 1-6-3 AIR PRESSURE: 86~106KPa(860~1060mbar)
 HOWEVER, IF DOUBT ARISED ON THE DECISION BASED ON THE MEASURED VALUES UNDER THE ABOVE-MENTIONED CONDITIONS, THE FOLLOWING CONDITIONS SHALL BE EMPLOYED.
  - 1-6-4 AMBIENT TEMPERATURE: 20±2°C
  - 1-6-5 RELATIVE HUMIDITY: 65±5% RH
  - 1-6-6 AIR PRESSURE: 86~106KPa(860~1060mbar)

2. PERFORMANCE

2-1 ELECTRICAL CHARACTERISTICS

No	ITEM	TEST CONDITIONS	PERFORMANCE
2.1.1	CONTACT RESISTANCE	APPLYING A STATIC LOAD TWICE THE ACTUATING FORCE TO THE CENTER OF THE STEM, MEASUREMENTS SHALL BE MADE WITH A 1KHz SMALL CURRENT CONTACT RESISTANCE METER.	100mOhm MAX
2.1.2	INSULATION RESISTANCE	MEASUREMENTS SHALL BE MADE FOLLOWING APPLICATION OF DC 100V POTENTIAL ACROSS TERMINALS AND ACROSS TERMINALS AND FRAME FOR ONE MINUTE.	100MOhm MIN
2.1.3	DIELECTRIC WITHSTAND VOLTAGE	AC 250V(50Hz OR 60Hz) SHALL BE APPLIED ACROSS TERMINALS AND ACROSS TERMINALS AND FRAME FOR ONE MINUTE.	THERE SHALL BE NO BREAKDOWN
2.1.4	BOUNCE	LIGHTLY STRIKING THE CENTER OF THE STEM AT A RATE ENCOUNTERED IN NORMAL USE(3 TO 4 OPERATIONS PER SEC.) BOUNCE SHALL BE TESTED AT ON' AND OFF'	10mSEC MAX

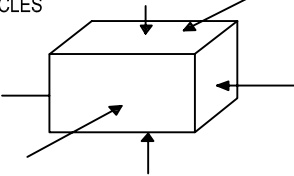
2-2 MECHANICAL CHARACTERISTICS

No	ITEM	TEST CONDITIONS	PERFORMANCE
2.2.1	OPERATING FORCE	PUSH BY RECOMMENDED OPERATING CONDITION.  FORCE PUSH FORCE RETURN FORCE STROKE	OPERATING FORCE: 160±50g
2.2.2	TRAVEL	PUSH BY RECOMMENDED OPERATING CONDITION. F=(OPERATION FORCE)X2  TRAVEL	0.25± 0.1mm
2.2.3	STOP STRENGTH	A STATIC LOAD OF 1Kgf SHALL BE APPLIED IN THE DIRECTION OF STEM OPERATION FOR A PERIOD OF 60 SECONDS	NO DAMAGE (ELECTRICAL AND MECHANICAL)
2.2.4	STEM STRENGTH	THE MAXIMUM FORCE TO WITHSTAND A PULL APPLIED OPPOSITE TO THE DIRECTION OF STEM OPERATION SHALL BE MEASURED.	500gf MIN
2.2.5	VIBRATION TEST	1) AMPLITUDE: 1.5mm 2) SWEEP RATE: 10-55-10Hz FOR 1 MINUTE. 3) SWEEP METHOD: LOGARITHMIC FREQUENCY SWEEP RATE. 4) VIBRATION DIRECTION: X.Y.Z(3 DIRECTIONS) 5) TIME: EACH DIRECTION 2 HOURS(TOTAL 6 HOURS)	No.2.1 AND 2.2.1 TO 2.2.2 SHALL BE SATISFIED.

NOTE: ALL DIMS ARE IN mm

PROJECTION		<b>RDI</b> Research Develop Innovate RDI, Inc. 333 North Bedford Road, Suite 135, Mount Kisco, NY 10549	
SCALE	N/A	TITLE Rohs Compliant Push Button Switch	
TOLERANCE EXCEPT AS NOTED	DR. Aris	DATE 04/14/11	REF. P/N: TA07BL-X-NL
DEC. MILLIMETERS	CK. MD	PRE-SW	DRAWING NO. 4064
			SIZE F
ANG.	N/A	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.	
SHEET	2 OF 4	REV.	-

ECN#	DATE	SYM	REVISION RECORD	AUTH	BY

No	ITEM	TEST CONDITIONS	PERFORMANCE
2.2.6	IMPACT SHOCK TEST	1) ACCELERATION: 80G 2) CYCLE OF TEST: 3 CYCLES EACH IN 6 DIRECTIONS, FOR A TOTAL 18 CYCLES 	No. 2.1 AND 2.2.1 TO 2.2.2 SHALL BE SATISFIED.
2.2.7	SOLDERING HEAT TEST	1) SOLDERING AREA: 1/2 OF P.W.B THICKNESS(P.W.B t=1.6) 2) SOLDERING TEMPERATURE: 260± 5°C 3) SOLDERING TIME: 5± 1 SEC	NO DAMAGE (ELECTRICAL AND MECHANICAL)

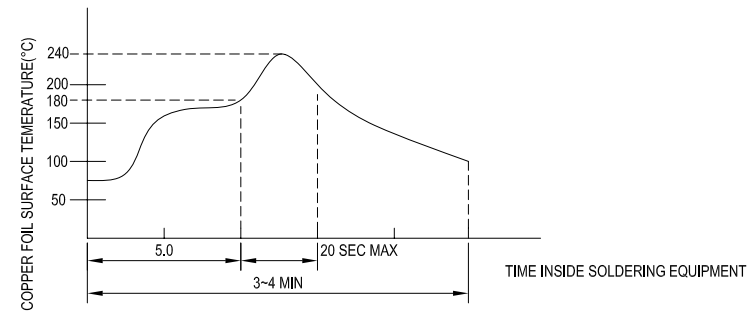
No	ITEM	TEST CONDITIONS	PERFORMANCE
2.3.6	WITHSTAND H <sub>2</sub> S	1) DENSITY: 3± 1 ppm 2) TEMPERATURE: 40± 2°C 3) RELATIVE HUMIDITY: 90-95% 4) DURATION OF TEST: 24 HOURS 5) STANDARD CONDITIONS AFTER TEST: 1 HOUR	CONTACT RESISTANCE: 300mOhm MAX. No 2.1.2 TO 2.1.4 AND 2.2.1 TO 2.2.2 SHALL BE SATISFIED.
2.3.7	WITHSTAND SO <sub>2</sub>	1) DENSITY: 10± 2 ppm 2) TEMPERATURE: 40± 2°C 3) RELATIVE HUMIDITY: 90-95% 4) DURATION OF TEST: 24 HOURS 5) STANDARD CONDITIONS AFTER TEST: 1 HOUR	

3. SOLDERING

REFLOW SOLDERING CONDITIONS

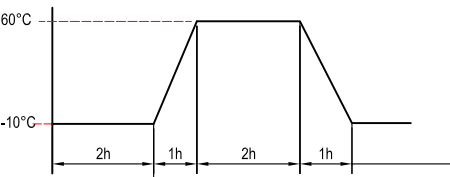
PREHEAT: TEMPERATURE ON THE COPPER FOIL SURFACE SHOULD REACH 180°C, 2±0.3 MINUTES AFTER THE P.W.B ENTERED INTO THE SOLDERING EQUIPMENT.

SOLDERING HEAT: TEMPERATURE ON THE COPPER FOIL SURFACE SHOULD REACH THE PEAK TEMPERATURE OF 240°C WITHIN 20SECONDS AFTER THE P.W.B ENTERED INTO SOLDERING HEAT SONZE


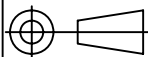


LED COLOR			
1	2	3	4
RED	YELLOW	GREEN	BLUE

2-3 CLIMATIC CHARACTERISTICS

No	ITEM	TEST CONDITIONS	PERFORMANCE
2.3.1	COLD TEST	1) TEMPERATURE: -30± 2°C 2) DURATION OF TEST: 96 HOURS 3) TAKE OFF A DROP WATER 4) STANDARD CONDITION AFTER TEST: 1 HOUR	CONTACT RESISTANCE: 200mOhm MAX. No 2.1.2 TO 2.1.4 AND 2.2.1 TO 2.2.2 SHALL BE SATISFIED.
2.3.2	HEAT TEST	1) TEMPERATURE: 80± 2°C 2) DURATION OF TEST: 96 HOURS 3) STANDARD CONDITION AFTER TEST: 1 HOUR	
2.3.3	TEMPERATURE CYCLE	1) TEST CYCLES: 5 CYCLES 2) STANDARD CONDITION AFTER TEST: 1 HOUR 3) 1 CYCLES 	
2.3.4	HUMIDITY TEST	1) TEMPERATURE: 60± 2°C 2) RELATIVE HUMIDITY: 90-95% Rh 3) DURATION OF TEST: 96 HOURS 4) TAKE OFF A DROP WATER. 5) STANDARD CONDITION AFTER TEST: 1 HOUR	
2.3.5	OPERATING LIFE TEST	1) DC 12V,5mA RESISTANCE LOAD 2) OPERATION SPEED: 40-60 CYCLES/SEC 3) PUSH FORCE: MAXIMUM VALUE OF OPERATION FORCE 4) CYCLE OF OPERATION: 100,000 CYCLES	CONTACT RESISTANCE: 200mOhm MAX. BOUNCE: 10m SEC MAX ACTUATING FORCE: ± 30% INITIAL FORCE No 2.1.2 TO 2.1.3 AND 2.2.2 SHALL BE SATISFIED.

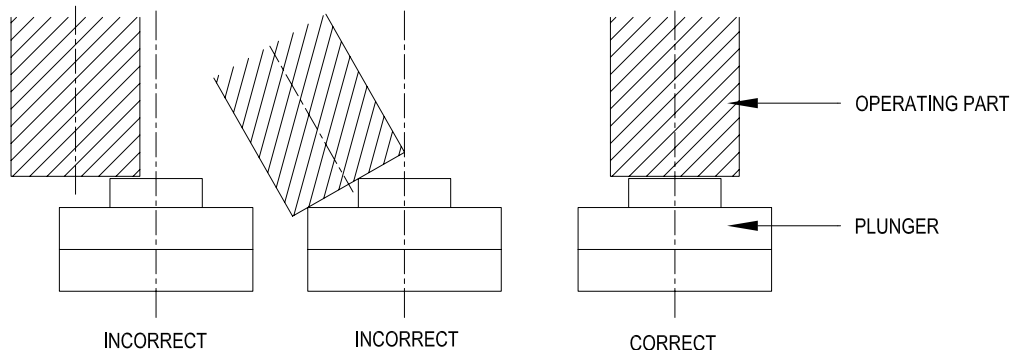
NOTE: ALL DIMS ARE IN mm

PROJECTION				Research Develop Innovate	
		RDI, Inc. 333 North Bedford Road, Suite 135, Mount Kisco, NY 10549			
SCALE		TITLE			
N/A		Rohs Compliant Push Button Switch			
TOLERANCE EXCEPT AS NOTED	DR. Aris	DATE 04/14/11	REF. P/N: TA07BL-X-NL	SHEET 3 OF 4	
DEC. MILLIMETERS	CK. MD	PRE-SW	DRAWING NO. 4064	SIZE F	REV. -
N/A		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.			

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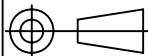
HANDING:

DO NOT REPEATEDLY OPERATE THE SWITCH WITH EXCESSIVE FORCE, APPLYING EXCESSIVE OR APPLYING ADDITIONAL FORCE AFTER THE PLUNGER HAS DEFORMED THE ISC SPRING OF THE SWITCH, RESULTING IN MALFUNCTION. IN PARTICULAR, APPLYING EXCESSIVE FORCE TO SIDE-OPERATED SWITCHES MAY DAMAGE THE CAULKING, WHICH IN TURN MAY DAMAGE THE SWITCH, DO NOT APPLY FORCE EXCEEDING THE MAXIMUM (29.4 N FOR 1 MINUTE, ONE TIME) WHEN INSTALLING OR OPERATING SIDE-OPERATED SWITCHES. BE SURE TO SET UP THE SWITCH SO THAT THE PLUNGER WILL OPERATE IN A STRAIGHT VERTICAL LINE. A DECREASE IN THE LIFE OF THE SWITCH MAY RESULT IF THE PLUNGER IS PRESSED OFF-CENTER OR FROM AN ANGLE.



PARAMETER	TEST CONDITION	SYMBOL	VALUE			UNIT
			MIN	TYP	MAX	
LUMINOUS INTENSITY	IF=20mA	Iv	-	250	-	mcd

NOTE: ALL DIMS ARE IN mm

PROJECTION		 <b>Research Develop Innovate</b> RDI, Inc. 333 North Bedford Road, Suite 135, Mount Kisco, NY 10549		
		TITLE Rohs Compliant Push Button Switch		
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