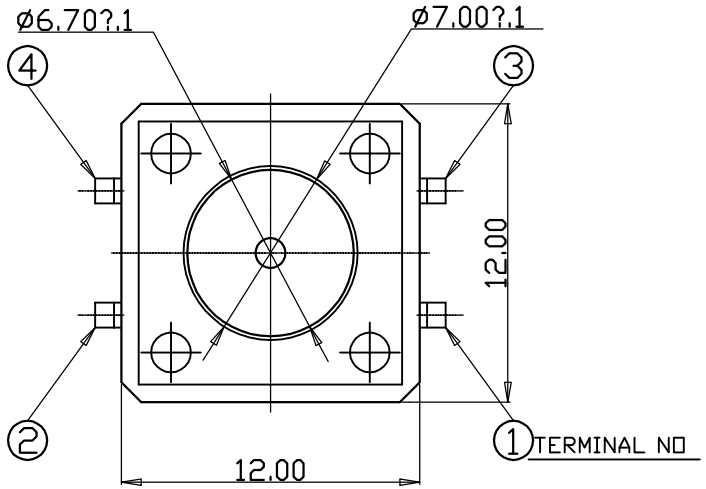
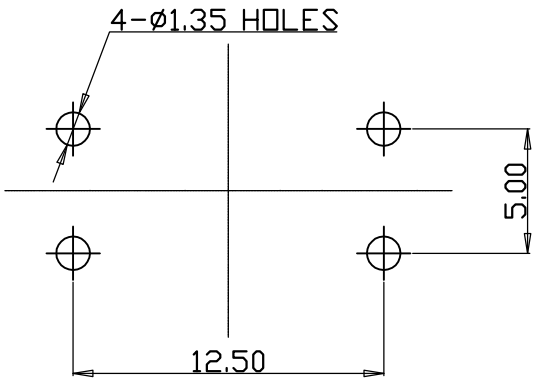
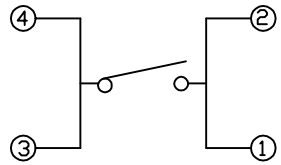
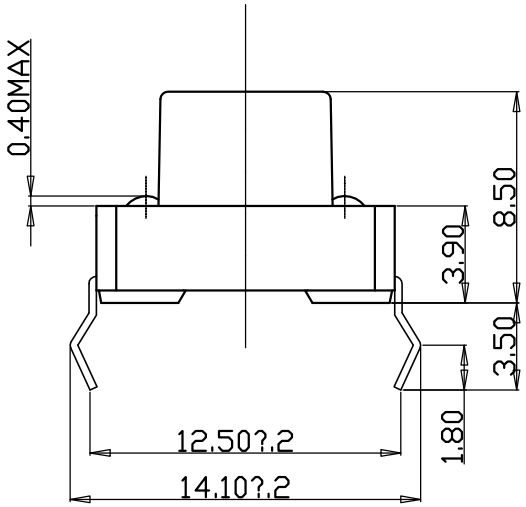


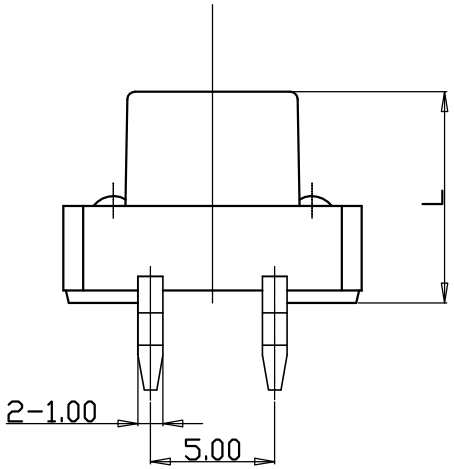
PCB DIMENSION



CIRCUIT DIAGRAM







NOTE

1. RATING : DC 12V 50mA
2. OPERATING FORCE : 180±50gf
3. TRAVEL : 0.25$^{+0.2}_{-0.1}$ m/m
4. CONTACT RESISTANCE : 100Ω MAX
5. MANUFACTURING SPECIFICATION WOULD BE ACCORDANCE WITH HT0102
5. L: 8.5mm

PART NO	PART NAME		Q'TY	MATERIAL	STANDARD	DISPOSITION
⑤		TRIGON-OMETRY	UNIT	SCALE 3/1	TACT SWITCHES	
④						
③		APPD	CHKD	DSGD yongwoon park		
②						
①					MODEL	INT-1103B85A
NO	CORRECTION					

INNOCENT ELECTRONICS CO.,LTD.

1. RATINGS 12V DC, 50mA

2. MECHANICAL SPECIFICATIONS

2.1 Actuating Force	As per individual specification
2.2 Return Force	Greater than 50gf
2.3 Stop Strength	Greater than 3kgf (for 3 seconds)
2.4 Travel	0.3 ± 0.15mm
2.5 Arrangement of Action	Tactile feed - back
2.6 Operating Temperature Rang	-30℃ ~ 80℃, 45 ~ 85%RH
2.7 Storage Temperature Range	-35℃ ~ 85℃ However, 96 hours maximum for continuous storage over a range -20℃ ~ 30℃ and range 70℃ ~ 80℃
2.8 Stem withdrawal Force	Greater than 500gf (pull vertically to the opposite direction of stem operation)

3. ELECTRICAL SPECIFICATIONS

3.1 Contact Arrangement	single pole, single throw
3.2 Contact Resistance	Less than 100mΩ when tested by the voltameter method at 5V DC 10mA, or by an ohmmeter allowing a small current at 1000Hz (measurements to the made with a 180±50gf, 250±50gf load applied vertically at the center of switch)
3.3 Insulation Resistance	Greater than 100MΩ (100V DC insulation resistance meter)
3.4 Dielectric Strength	Capable of withstanding 250V AC, for 1(one) min.
3.5 Bounce	Less than 10msec (the key shall be struck lightly vertically at its center at a uniform cycling rate of 3 operations per second)

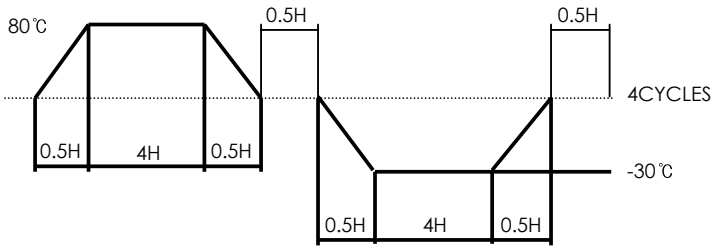
4. ENDURANCE

4.1 Operating Life	Following 100,000cycles of operation cycling rate (2 operations per sec.)at a force of depression not exceeding 180gf with a resistive load supplying 12V DC, 50mA, the following requirements shall be satisfied :
4.1.1 Actuating Force	Plus or minus 50% of the initial force
4.1.2 Contact Resistance	Less than 100mΩ
4.1.3 Bounce	Less than 20mΩ
4.2 Moisture Resistance	Following exposure to a 60℃ ±2℃, 90 ~ 95%RH, environment in a test chamber for 96 hours and then, out of the chamber, to room condition of normal temperature and humidity for 30 minutes, the requirements set forth below shall be met.
4.2.1 Insulation Resistance	Greater than 10MΩ
4.2.2 Dielectric Strength	Same as Item 3.4
4.2.3 Contact Resistance	Same as Item 3.2
4.3 Heat Resistance	Following exposure to an 85℃ environment in a test chamber for 96 hours and then, out of the chamber, to room condition of normal temperature and humidity for 30 minutes, the requirements in Items 2 and 3 shall be satisfied.

4.4 Resistance to Low Temperature

Following exposure to a -40℃ environment in a test chamber, to room condition of normal temperature and humidity for 30 minutes, the requirements in Items 2 and 3 shall be met.

4.5 Thermal Cycling



Following 5 cycles of a thermal cycling test, on cycle of which is prescribed in the diagram above, the requirements in Items 2 and 3 shall be met.

4.6 Shock Resistance — Following application of an impact shock of 30G in accordance with the method 205, MIL - STD - 202, the requirements in Items 2 and 3 shall be met.

4.7 Vibration Resistance — Following the test conducted according to the method 201, MIL - STD -202, the switch under test shall conform to the requirements in Items 2 and 3 without any sign of defect both in appearance and actuation.

5. AUTOMATIC SOLDERING CONDITIONS (in case he automatic flow soldering is to be used)

5.1 Soldering Temperature — 230℃ max

5.2 Soldering Time — Continuous dipping duration shall not exceed 5 second.

5.3 Permissible Soldering Times — 2 time max (twice soldering would be dipped after the temperature goes down to a normal temperature)

5.4 Preheat Temperature — 100℃ max (circumferential temperature of the printed writing board)

5.5 Preheat Time — 45 seconds max

5.6 Flux Streaming — Flux streaming shall be controlled so that it shall not swell beyond the printed writing board where components are installed.

5.7 Other Precautions

(1) Flux shall not be applied to switch terminals and the part mounting surface of the P.W. board before soldering.

(2) Do not wash to switch after soldering.

DATE		DESIGNED	CHECKED	APPROVED	PAGE
S/W TYPE	TACT S/W				2/2
MODEL NO.	INT-1103B				
DOCUMENT NO.		/ /	/ /	/ /	