

1. General

SWITCH SPECIFICATIONS		
Switch Action	Push on Type SPSD	
Electrical Ratings	500mA @30Vdc	
Operating Life	300,000 Cycle Min	
Operating Temperature range	-25℃~70℃	
Appearance and dimensions	See outside drawing page	
Standard conditions: Unless otherwise specified, the test and measurements shell be carried out as follows		
Ambient temperature	15~35℃	
Relative humidity	25~85% RH	
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 50g Max force to the center of the stem, measurements	100min ohm Max(initial)
		shall be made with low-current contact resistance meter.	
2.1.2	Insulation Resistance	Measurements shall be made following application of DC 500 V potential across terminals and across terminals and frame for one minute.	100MΩ Min
2.1.3	Dielectric with standing Voltage	AC 250 V (50Hz or 60Hz) shall be applied across terminals and across terminals and frame for one minute.	There shell be no breakdown

2.2 Mechanical characteristics

NO	ITEM	TEST CONDITIONS	PERFORMANCE
2.2.1	Operating force	Placing the switch such that the direction of switch operation is vertical, the force to withstand a pull applied opposite to the direction of stem operation.	120gf Max
2.2.2	Operating Position	Placing the switch such that direction of switch operation is vertical and then applying a static load twice the actuating force to the center of the stem, the travel distance for the stem to come to on position shall be measured.	5.6±0.15mm
2.2.3	Vibration test	 Amplitude:1.5mm Sweep rate:10-55-10Hz for 1 minute Sweep method: Logarithmic frequency sweep rate vibration direction :X.Y.Z(3directions) Time :Each direction 2 hours(total 6 hours) 	No 2.1and2.2.1to 2.2.2 shell be satisfied

2.3 Endurance

Environmental Test		
Item	Test Condition	
Resistibility to heat	Placed in a chamber at 75±2°C for 96 hours and then cooled in normal temperature and humidity for an hour	
Resistibility to cold	Placed in a chamber at -40±2°C for 96 hours and then cooled in normal temperature and humidity for an hour	
Resistibility to humdity	Placed in a chamber at 40±2°C and 90~95% RH for 96 hours and then cooled in normal temperature and humidity for an hour	
Durability		
Item	Test Condition	
Endurance with load	300,000 cycles operations at rate of 15~20 cycle per 1 minute with rating	
Vibration proof	Measured after the switch is fixed in a chamber under below condition	
Vibration frequency range	10~55Hz	
Total amplitude	1.5mm	
Sweep ratio	10~55~10(Hz)approx 1min	
Method of changing the sweep vibration of frequency	Logic or straight line	
Direction of Vibration	Three vertical directions including the control shaft	
Test time	Each 2 hours(total 6 hours)	

3. SOLDERING

Item	Soldering condition	
Manual	300°C±5°C	
Wave Soldering	260°C±5°C About 3 seconds	

- 1) After switches were soldered, please be careful not clean with solvent.
- 2) In the case of using soldering iron , soldering conditions shell be 350 $^{\circ}\mathrm{C}\,$ max and 3 sec max
- 3) After switches were soldered, please be careful not to load the actuator of switches

4. Materials

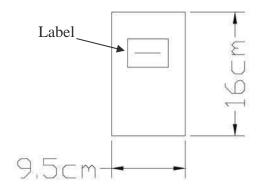
Materials list			
Item	Description	Material	Remark
1	Terminals	Brass	Ag-Plate
2	Body	PBT+15%Fib	
3	Cover	POM	
4	Button	POM	
5	Contact	BeCu with Ag	

5. Packaging unit

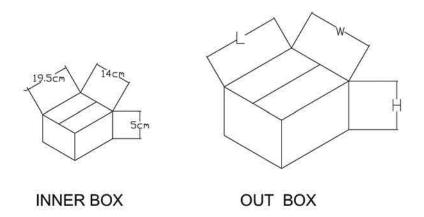
5.1.1The capacity of packing carton

	Carton type	Carton Dimension
32k Pcs	Carton box 16 packing carton at most	41cm X 24.5cm X 33cm
20K Pcs	Carton box 10 packing carton at most	33.5cm X 25cm X 26cm
10K Pcs	Carton box 5 packing carton at most	28.5cm X 19cm X 17cm

- 5.1.2 Every packing carton contains 2000pcs goods at most •
- 5.1.3 Every plastic bag contains 500pcs goods •
- 5.2 The shape and dimension of Plastic Bag



5.3 The shape and dimension of packing carton



6. Handling precautions

- 6.1. Following the soldering process, do not try to clean the switch with a solvent or like
- 6.2. Safeguard the switch assembly against flux penetration
- 6.3.Do not push the actuator strong to prevent the actuator bending
- 6.4. This switch is RoHS compliant