

## ~ Slide Switch Specification BSL-SS12D02 Series~

### 1、Induction：

This specification intends to provides a guideline for the engineering qualification and summarize the results of standard **“Slide Switch”**. All the dimension here in millimeter unless indicated otherwise. All the tests and measurements shall be made in the following standard conditions unless otherwise specified.

Normal temperature	Temperature <b>5 to 35℃</b>
Normal humidity	Relative humidity <b>45 to 85%</b>
Normal pressure	Pressure <b>860 to 1060 m bars</b>

### 2、Electrical performance

Item	Test Condition	Specification
2.1 RATING		DC 50V 0.3A
2.2 FUNCTION		1P2T
2.3 TIMING		NON-SHORTING
2.4 CONTACT RESISTANCE	1000 Hz MEASURED AT SMALL CURRENT(100 mA OR LESS	30mΩ MAX.
2.5 INSULATION RESISTANCE	APPLY A VOLTAGE OF 500V DC SHALL BE APPLIED FOR 1 MIN AFTER WHICH MEASUREMENT BE MADE: (1) BETWEEN TERMINALS. (2) BETWEEN INDIVIDUAL TERMINALS AND FRAME.	100MΩ MIN.
2.6 DIELECTRIC STRENGTH	AC 500V rms(50-60Hz)FOR 1 MIN TRIP CURRENT:0.5 mA (1) BETWEEN TERMINALS. (2) BETWEEN INDIVIDUAL TERMINALS AND FRAME.	WITHOUT DAMAGE TO PARTS ARCING OR BREAKDOWN, ETC.

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### 3、Mechanical characteristic

Item	Test conditions	Specification
3.1 OPERATING FORCE	MEASUREMENT SHALL BE MADE AT THE NEAREST POINT OF THE COMPONENT OR AT THE POINT 3mm FROM THE TIP OF THE ACTUATOR (KNOB).	250gf±100gf
3.2 TERMINAL STRENGTH	A STATIC LOAD OF 300gf SHALL BE APPLIED TO THE TERMINAL FOR 15 SEC.IN ANY DIRECTION	ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED WITHOUT DAMAGE OR EXCESSIVE LOOSENESS OF TERMINALS.
3.3 DISPLACEMENT OF ACTUATOR (KNOB)	A STATIC LOAD OF 10 N(1Kgf)SHALL BE APPLIED TO THE TOP OF THE ACTUATOR(KNOD) AND THEN DISPLACEMENT SHALL BE MEASURED TO THE DIRECTION OF THE ARROW.	THE LEVER SHALL HAVE NO SERIOUS DEFORMATION AND FUNCTION IS NORMALLY

### 4、ENDURANCE CHARACTERISTICS

Item	Test conditions	Specification
4.1 LIFE TEST	ENDURANCE WITHOUT LOADING: A SWITCH SHALL BE SUBJECTED TO 10,000 CYCLES AT A SPEED OF 15 TO 18 CYCLES PER MINUTE WITHOUT LOADING	(1) CONTACT RESISTANCE: 100mΩ MAX. (2) INSULATION RESISTANCE: 50MΩ MIN. (3) WITHSTAND VOLTAGE: AC 500V,1 MINUTE.AC 500V (4) OPERATING FORCE: ±30% INITIAL VALUE. (5) WITHOUT DAMAGE TO PARTS ARCING OR BREAKDOWN ETC.
4.2 SOLDERABILITY TEST	THE TOP OF THE TERMINALS SHALL BE DIPPED 2mm IN THE SOLDER BATH OF 230±5℃ FOR 3±0.5 SECONDS.	THE AREA OF SOLDERING SHOULD BE OVER 75%.

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<b>4.3</b> <b>RESISTANCE TO</b> <b>SOLDERING HEAT</b> <b>TEST</b>	<b>SOLDER BATH METHOD:</b> <b>SOLDER TEMPERATURE <math>260\pm5^{\circ}\text{C}</math></b> <b>IMMERSION TIME <math>3\pm0.5</math> SEC</b> <b>IMMERSION DEPTH UP TO THE</b> <b>SURFACE OF THE BOARD THICKNESS</b> <b>OF PRINTED WIRING BOARD 1.6mm</b> <b>DIMENSIONS OF COMPONENT HOLES</b> <b>IN THE PRINTED WIRING BOARD</b> <b>SHALL BEING ACCORDANCE WITH</b> <b>THOSE SPECIFIED IN THIS</b> <b>SPECIFICATION.</b>	<b>WITHOUT DEFORMATION OF CASE</b> <b>OR EXCESSIVE LOOSENESS OF</b> <b>TERMINALS ELECTRICAL</b> <b>CHARACTERISTICS SHALL BE</b> <b>SATISFIED.</b>
<b>4.4</b> <b>COLD TEST</b>	<b>THE SWITCH SHALL BE STORED AT A</b> <b>TEMPERATURE OF <math>-25\pm3^{\circ}\text{C}</math> FOR 48</b> <b>HOURS.</b> <b>THEN THE SWITCH SHALL BE</b> <b>MAINTAINED AT STANDARD</b> <b>ATMOSPHERIC CONDITIONS FOR 1</b> <b>HOUR AFTER WHICH MEASUREMENT</b> <b>SHALL BE MADE.</b>	<b>THERE SHALL BE NO</b> <b>DEFORMATION OR CRACKS IN</b> <b>MOLDED PART.</b>
<b>4.5</b> <b>HEAT TEST</b>	<b>THE SWITCH SHALL BE STORED AT A</b> <b>TEMPERATURE OF <math>70\pm2^{\circ}\text{C}</math> FOR 48</b> <b>HOURS. THEN THE SWITCH SHALL</b> <b>BE MAINTAINED AT STANDARD</b> <b>ATMOSPHERIC CONDITIONS FOR 1</b> <b>HOUR AFTER WHICH MEASUREMENT</b> <b>SHALL BE MADE.</b>	
<b>4.6</b> <b>HUMIDITY TEST</b>	<b>THE SWITCH SHALL BE STORED AT A</b> <b>TEMPERATURE OF <math>40\pm2^{\circ}\text{C}</math> AND A</b> <b>HUMIDITY OF 90% TO 95% FOR 96</b> <b>HOURS. THEN THE SWITCH SHALL BE</b> <b>MAINTAINED AT STANDARD</b> <b>ATMOSPHERIC CONDITION FOR 1</b> <b>HOUR AFTER WHICH MEASUREMENT</b> <b>SHALL BE MADE.</b>	<b>THERE SHALL BE NO</b> <b>DEFORMATION OR CRACKS IN</b> <b>MOLDED PART.</b>

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<b>4.7</b> <b>STANDARD</b> <b>ATMOSPHERIC</b> <b>CONDITIONS</b>	<b>UNLESS OTHERWISE SPECIFIED.</b> <b>THE STANDARD RANGE OF</b> <b>ATMOSPHERIC CONDITIONS FOR</b> <b>MAKING MEASUREMENTS AND</b> <b>TESTS ARE AS FOLLOWS:</b> <b>(1) AMBIENT TEMPERATURE : 5°C TO 35</b> <b>°C</b> <b>(2) RELATIVE HUMIDITY : 45% TO 85%</b> <b>(3) AIR PRESSURE : 86Kpa TO 106Kpa</b>	
<b>4.8</b> <b>PRACTICAL</b> <b>TEMPERATURE</b> <b>RANGE</b>	<b>-16°C~+60°C.</b>	