

## 共通仕様

### ■小形スイッチ共通仕様

(JIS C 6571)

〈トグル、押ボタン、ロッカー、スライド〉

1. 初期接触抵抗  
初期の接触抵抗は、DC2~4V1Aで連続5回開閉を行なって各接触時に測定し20mΩ以下です。
2. 耐電圧  
常圧中において絶縁された端子・端子間および端子・アース間に50~60Hzの交流を、定格最大電圧が125Vの時1000V、250Vの時1500Vを1分間印加しても異常ありません。
3. 絶縁抵抗  
絶縁された端子・端子間および端子・アース間を直流500V絶縁抵抗計で測定し、100MΩ以上です。
4. 電氣的寿命  
定格電圧電流を通じて1分間12回の割合で5,000~30,000回の開閉動作が可能です。
5. 耐寒性  
-40±3°Cの恒温槽中に2時間放置した後もケース、絶縁物にヒビ、ワレ、ガタなどがなく電氣的、機械的動作に異常ありません。また、試験後、水滴を十分取り除き1時間以上放置して絶縁抵抗を測定し10MΩ以上です。
6. 耐熱性  
70±2°Cの恒温槽中に16時間放置した後も、過度の緩み、ガタなど異常ありません。また、試験後1時間放置し、絶縁抵抗を測定し、100MΩ以上です。
7. 耐湿性  
温度40±2°Cの相対湿度95%中に96時間放置した後、取り出し水滴を払い5分以内に絶縁抵抗を測定し、10MΩ以上です。
8. 耐振性  
振動数10~55Hz、全振幅1.5mmの振動を3方向各2時間加えても誤開閉、破損など異常ありません。
9. 耐衝撃性  
加速度490m/s<sup>2</sup> {50G}、持続時間11msecの衝撃を6方向、それぞれ3回加えても誤開閉、破損など異常ありません。
10. 静電容量  
周波数1MHz±200Hzの交流電圧で端子間の静電容量を測定し、5pF以下であること。
11. 使用温度範囲  
-15~+70°C

## Common Specifications

### ■Common Specifications for Miniature Switches (JIS C 6571)

〈Toggle, Pushbutton, Rocker, and Slide Switches〉

1. Initial Contact Resistance  
The initial contact resistance is measured at each contact when opening and closing operations are conducted five times in a row at 2 to 4 VDC, 1A and the value shall be 20 mΩ or below.
2. Dielectric Strength  
There is no problem when the 50-60 Hz AC current of 1,000 V at rated max. voltage is 125 V or 1,500 V at 250 V is applied for one minute across the terminals and across terminals and the ground that are insulated under the normal pressure.
3. Insulation Resistance  
The insulation resistance is measured across the insulated terminal and across terminals and ground with a 500 VDC insulation resistance tester and the value shall be 100 MΩ or over.
4. Electrical Life  
5,000 to 30,000 opening and closing operations are possible at the rate of 12 cycles a minute while applying the rated voltage and current.
5. Cold Resistance  
There is no problem regarding electrical and mechanical operations such as cracks, breaks, and rattling on the housing and insulation materials even after the switch is left for two hours in the constant temperature bath of -40°C ±3°C. In addition, after the test, the insulation resistance is measured after removing moisture sufficiently and leaving the switch as it is for one hour or longer and the value shall be 10 MΩ or over.
6. Heat Resistance  
There is no excessive loosening and rattling even after the switch is left as it is for 16 hours in the constant temperature bath of 70°C ± 2°C. In addition, after the test, the insulation resistance is measured after being left for one hour, and the value shall be 100 MΩ or over.
7. Humidity Resistance  
After leaving the switch as it is for 96 hours in the atmosphere of 95% relative humidity at temperature of 40°C ± 2°C, moisture is removed, the insulation resistance is measured within five minutes, and the value shall be 10 MΩ or over.
8. Vibration Resistance  
There is no problem such as wrong operations and breakage when vibrations of 10-55 Hz and total amplitude of 1.5 mm are applied to the switch in three directions for two hours, respectively.
9. Shock Resistance  
There is no problem such as wrong operations and breakage when a shock of 490 m/s<sup>2</sup> (50 G) acceleration and 11 msec duration is applied to the switch in six directions three times, respectively.
10. Electrostatic Capacity  
When the electrostatic capacity is measured across terminals at an AC voltage of 1 MHz ± 200 Hz frequency, the value shall be 5 pF or below.
11. Operating Temperature Range  
The range shall be -15°C to +70°C.