# **Push Button Switch**





### RoHS Compliant

#### **Style**

This specification describes "Snap-Acting Pushbutton Switch", mainly used as signal switch of electric devices, with the general requirements of mechanical and electrical characteristic.

Operating Temperature Range : -30°C to +85°C

Current Range : 100mA, 24V DC

Silver Plating Standard

Fixed Terminal : Copper alloy with silver plated over gold plate. (C = Gold over silver)

Movable contact : Copper alloy with silver plated over gold plate. (C = Gold over silver)

Type of Actuation : Snap-Acting Pushbutton Switch

#### **Test Sequence**

Description	Test Conditions	Requirements		
Appearance				
Visual Examination	By Visual Examination check without and out pressure & testing.	There shall be no defects that affect the serviceability of the product.		
Electric Performance				
Contact Resistance	To be measured between the two terminals associated with each switch pole.	50mΩ Max.		
Insulation Resistance	Measurements shall be made following application of 500V/DC 100mA potential across terminals and cover for 1 minute.	1,000MΩ min/500V.		
Dielectric Withstanding Voltage	1,000V AC (50Hz or 60Hz) shall be applied across terminals and cover for 1 minute	There shall be no breakdown or flashover.		
Actuation Force	MODEL-1305N Mechanical Test 500gram, 1,000gram, 2,000gram. OFF TO ON Total Travel	1. At for test the force. Force: 2 ~ 5N. 2. Total Travel: 2.5mm ±0.25mm		
Operating Life				
Operating Life	Measurements shall be made following the test forth below:  1. 100mA, 24V DC resistive load - gold over silver plated.  2. Electronics Life Test: 200,000 cycles.  3. Rate of Operation: 6-8 operation cycles per minute.  4. Mechanical Life Test: 1,000,000 cycles.	Electronics Life Test: As shown in item Insulation Resistance & Dielectric Withstanding Voltage.     Mechanical Life Test: As shown in item Contact Resistance, Insulation Resistance & Dielectric Withstanding Voltage		





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Description	Test Conditions	Requirements		
Humidity Resistance				
Resistance Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for 1 hour before the measurements are made:  1. Temperature: -30°C ±3°C.  2. Time: 96 hours.	As shown in: Contact Resistance, Insulation Resistance & Dielectric Withstanding Voltage		
Resistance High Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before the measurements are made:  1. Temperature: 85°C ±3°C.  2. Time: 96 hours	As shown in: Contact Resistance, Insulation Resistance & Dielectric Withstanding Voltage		
Resistance Humidity	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before the measurements are made:  1. Temperature: 40°C ±2°C.  2. Relative Humidity: 90~95%.  3. Time: 96 hours.	As shown in: Contact Resistance, Insulation Resistance & Dielectric Withstanding Voltage		
The Salt Testing	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before the measurements are made:  1. Temperature: 35°C ±2°C.  2. The ratio of salt-water: 5%.  3. The spray amount of salt- water: 1~2 ml/h.  4. Time: 48 hours.	The testing standard based on bubble, crack, and magnifying glass with gauge.		
Test of IP 67	Upper side: Protected against the effects of temporary immersion in water. (1m below the surface of the water for a duration of 30 min)	IP67 According to EN 60529: 1991+A1: 2000 IEC 60529: 2001		
Solder Heat Resistance				
Wave Soldering	Wave Soldering:  1. Soldering Temperature: 260°C ±5°C.  2. Duration of Solder Immersion: 5 ±1 seconds  Temperature Profile  Peak: 280°C  250  200  150  100  50  Room  Temperature  Time (Sec)	Shall be free from pronounced backlash and falling-off or breakage terminals. As shown in "Electric Performance"		
	PCB is 1.6mm in thicknes			





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#### **Part Number Table**

Description	Part Number
Dual-button Cuitale With High Con	PAL6B2M1CESG2-5
Pushbutton Switch With High Cap	PAL6B2M1CESG3-5

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