

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

Bushing Plastic Material : 400mA @32V AC Max.
100mA @50VDC Max.
125mA @125VAC Max.

Bushing Metal Material : 500mA @48VAC Max.
200mA @50VDC Max.
200mA @250VAC Max.

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.	1GΩ min/500V.
Dielectric Withstanding Voltage	1. 1,000V AC (50Hz or 60Hz) shall be applied across terminals and cover for 1 minute. (for bushing plastic material) 2. 1,500V AC for bushing metal material.	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: 1.5mm ±0.25mm

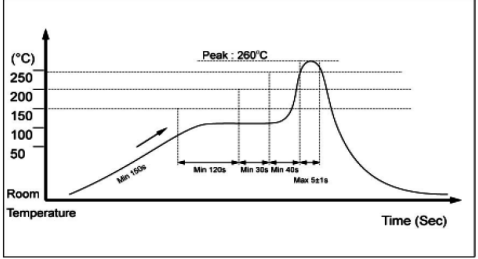
Push Button Switch



Description	Test Conditions	Requirements
Operating Life		
Operating Life	Measurements shall be made following the test forth below: 1. Plastic Material: 100mA, 50V DC resistive load - gold over silver plated . 2. Metal Material: 200mA, 50VDC resistive load - gold over silver plated. 3. Electronics Life Test: 500,000 cycles. 4. Rate of Operation: 6-8 operation cycles per minute. 5. Mechanical Life Test: 1,000,000 cycles.	1. Electronics Life Test: As shown in item Insulation Resistance & Dielectric Withstanding Voltage. 2. Mechanical Life Test: As shown in item Contact Resistance, Insulation Resistance & Dielectric Withstanding Voltage
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.	1. Contact Resistance: 50mΩ Max. 2. Insulation Resistance: 1GΩ min.
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

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Description	Test Conditions	Requirements
Solder Heat Resistance		
Wave Soldering	Wave Soldering: - Soldering Temperature: $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$. - Duration of Solder Immersion: 5 ± 1 seconds Temperature Profile  PCB is 1.6mm in thickness	Shall be free from pronounced backlash and falling-off or breakage terminals. As shown in: Contact Resistance, Insulation Resistance & Dielectric Withstanding Voltage

Part Number Table

Description	Part Number
Pushbutton Switch With High Cap	PAS6B2M1CESG2-5
	PAS6B2M1CESG3-5
	PAS6D2AM1CESG2-5
	PAS6D2M1CESG3-5

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