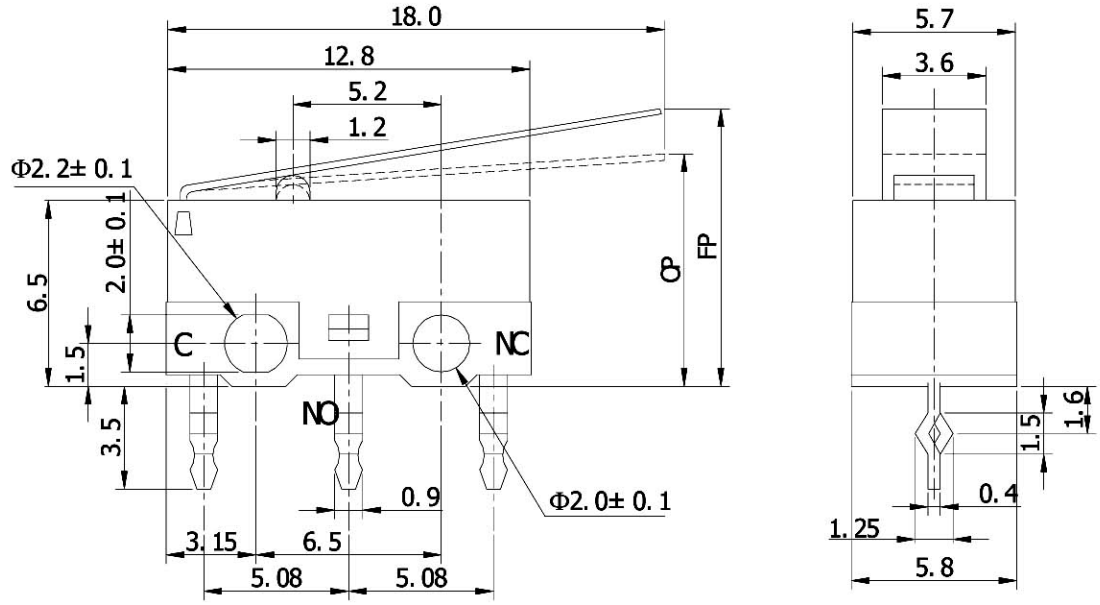
SM1036

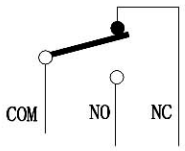
RoHS

1. Functional spec.			
1.1 Rated Voltage AC125V 3A AC250V 1.5A		1.5 Free Position	12.0± 0.8mm
		1.6 Operating Position	9.5±0.8mm
1.2 Contact Resistance	≤ 100mΩ(Initial value)	1.7 Position Travel	
1.3 Operating Force	30±15gf	1.8 Return Force	
1.4 Bounce Time		1.9	
2.Reliable Rating			
2.1 Mechanical Life	500,000 CYCLES	2.5 Soldering technics	Hand soldering
2.2 Electrical Life	10,000 CYCLES	2.6 Operating Temper	-25℃～+75℃
2.3 Insulation Resistance	≥ 100MΩ DC500V(Initial value)	2.7 Ambient Humidity Used	<85%RH
2.4 Withstand Voltage	AC500V 1 minute(Initial value)	2.8	

3. Dimension Drawing



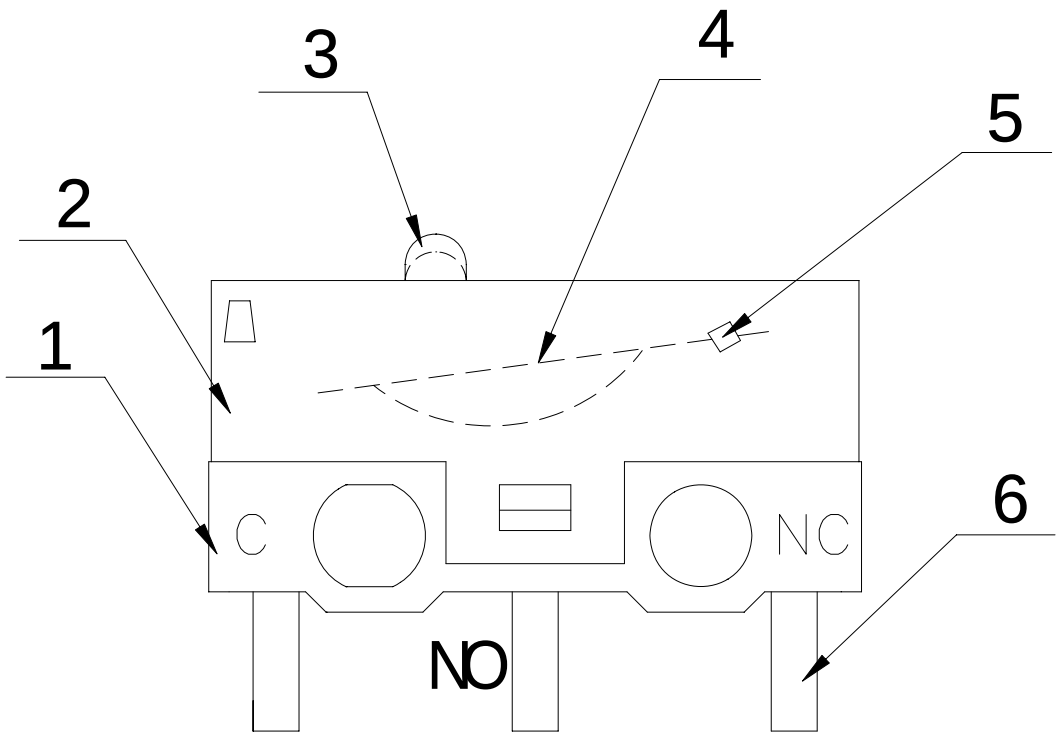
SCHEMATIC



Unit: mm

NO.	Part Name	Q'TY	Generic Class
1	Base	1	PBT
2	Case	1	PBT PLASBLACK
3	Button	1	PBT PLASTIC COLOURS(GREY)
4	Spring Plate	1	C1720
5	Contact	3	Silver alloy
6	Terminal	3	C2680

Structure chart:



1、General：

1.1 Switch rating： AC125V 3A/AC250V 1.5A

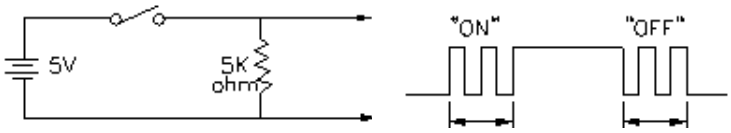
1.2 Operating temperature range -25℃~75℃

1.3 Preservative temperature range -40℃~85℃

1.4 Storage humidity range <85%RH

2.Performance

2.1 Electrical characteristics

Items		Test conditions
2.1.1	Contact resistance	Applying a static load twice the operating force to the button, measurements shall be made between the terminals. Measurement shall be made with a stablization contact resistance meter for 2 mΩ precision under the condition which a voltage of DC5V and a current of 0.1A shall be applied between the terminals.
2.1.2	Insulation resistance	Spec. voltage is applied between each pair of terminals and between the terminal and the metal frame for one minute. Measurement shall be made with a test instrument of insulation resistance under the condition which a voltage of spec.voltageis applied between the terminals.
2.1.3	Dielectric withstand in voltage	Spec. voltage shall be applied across terminals and frame for one minute.
2.1.4	Bounce	Lightly striking the center of the button at a rate encountered in normal use (3 to 4 operating per sec.) bounce shall be tested at “ON” and “OFF”. 
3.Mechanical characteristics		
3.1	Free Position	Position of switch plunger or actuation when on external force is applied.
3.2	Operating Position	Position of switch plunge or actuator at which point contacts snap from normal to operated position. Note that the case of flexible of adjustable actuators.

3. 3	Operating Force	Placing the switch such that the direction of switch operation is vertical, and then gradually increasing the load applied to the button, the maximum load for the button to come to operating position shall be measured.	
3. 4	Terminal Strength	Placing the switch such that the direction of switch operation is vertical, a static load of 3kgf Max shall be applied to the tip of the terminal in the direction of operation for one minute.	
3. 5	Button Strength	Placing the switch such that the direction of switch operation is vertical, a static load of 3kgf Max shall be applied to the center of the button in the direction of button operation for one minute.	
4. soldering characteristics			
4.1	Hand soldering	Use a soldering iron of 30 watts , controlled at 350～360℃ approximately 3 seconds 1 time while applying solder.	
5. Durability characteristic:			
5.1	Mechanical life	(1) Without loading (2) Operating speed : 120 cycles/minute (3) Push force : maximum value of operating force twice (4) Life: 500,000 cycles	After test: (1)Contact resistance:1 ohm Max. (2)Insulation resistance: 10M ohm Min. (3)Bounce: 5m sec. Max. (4)Withstand voltage: AC500V, 1 minute (5)Operating force: 30% of initial value (6)There shall be no defects in appearance or in the mechanical functions.
	Electrical life	(1) Operating speed : 10 cycles/minute (2) Push force : maximum value of operating force twice (3) which the load of 3A 125VAC Life: 10,000 cycles (4) which the load of 1.5A 250VAC Life:10,000cycles	