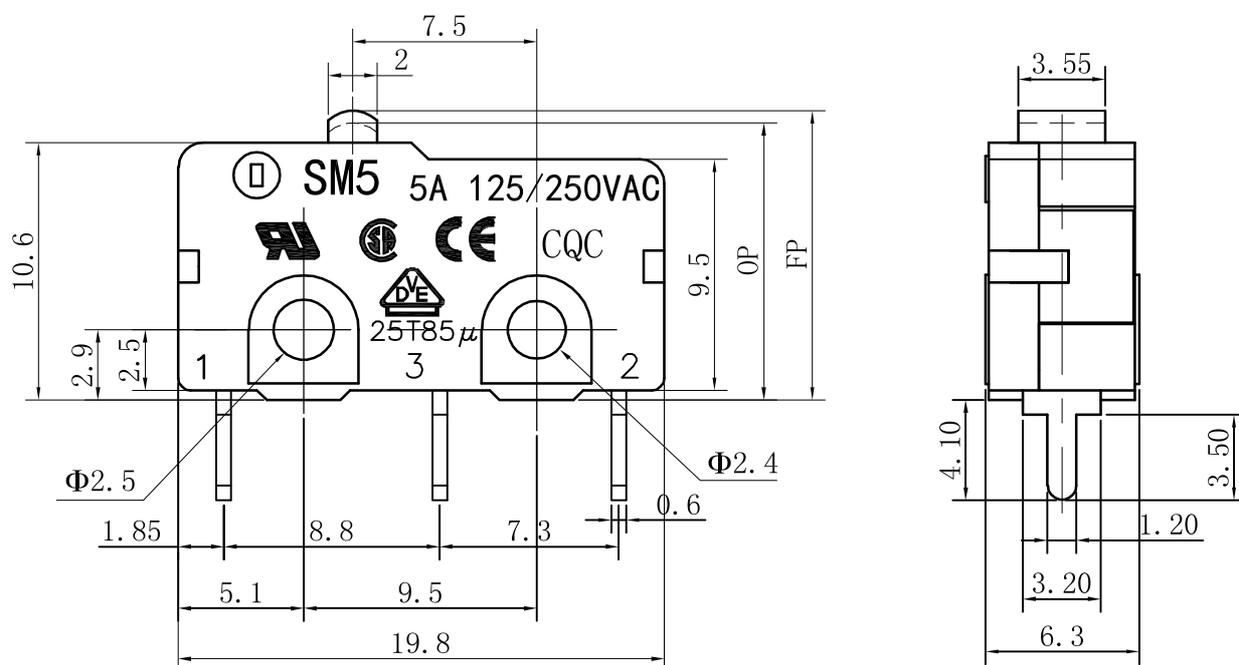
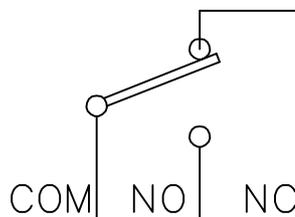


1. Functional spec.			
1.1 Rated Voltage	125/250VAC	1.6 Free Position	11.9 ± 0.3mm
1.2 Rated Current	5A	1.7 Operating Position	11.3 ± 0.35mm
1.3 Contact Resistance	≤ 100mΩ (Initial value)	1.8 Position Travel	
1.4 Operating Force	150 ± 40gf	1.9 Return Force	
1.5 Bounce Time		1.10	
2. Reliable Rating			
2.1 Mechanical Life	1,000,000 CYCLES	2.5 Soldering Technic	Hand Soldering
2.2 Electrical Life	10,000 CYCLES	2.6 Operating Temper	-25° C - +85° C
2.3 Insulation Resistance	≥ 100MΩ DC500V	2.7 Ambient Humidity Used	<70%RH
2.4 Withstand Voltage	AC1000V 1 minute	2.8	

## DIMENSIONS



## SCHEMATIC



Part no.: SM5-00P-150S-C51

Part name: Micro switch



廣容科技股份有限公司

PACER TECHNOLOGY CO., LTD.

DWG. no.: A0905032

Revision 2

Range

Tolerance

Check

Design

Drawn

Projection:

-----

± 0.3

David  
2022.08.03

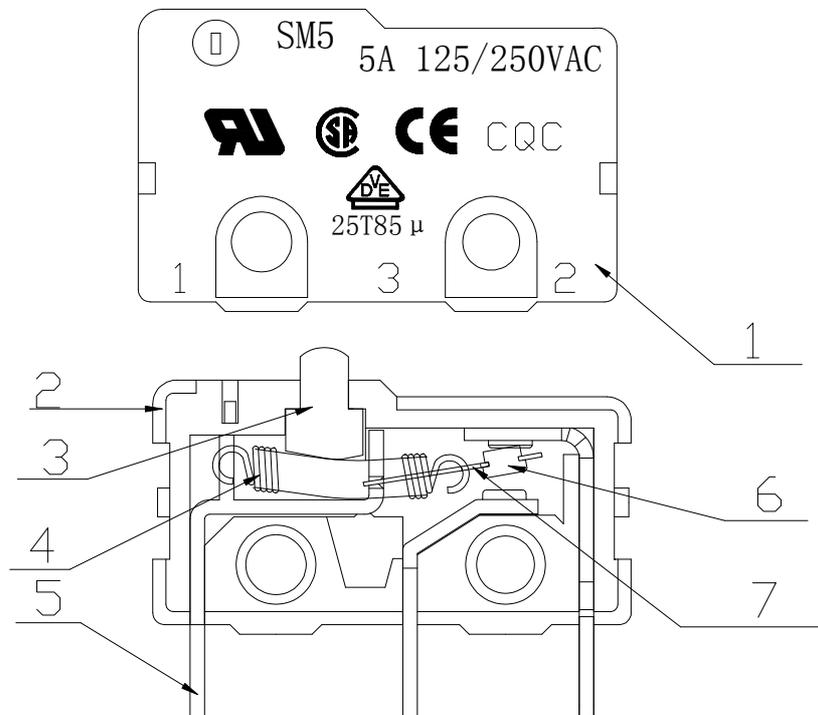
Andrew  
2022.08.03

Unit: mm[Inch]

**SPECIFICATION**

NO.	Part Name	Q'TY	Generic Class	Remark
1	Upper Housing	1	PBT	
2	Lower Housing	1	PBT	
3	Button	1	PBT	Black color
4	Spring	1	SUS304	
5	Terminal	3	C2680	
6	Contact	3	Silver alloy	
7	Change Plate	1	C5210	

Structure chart:



**SPECIFICATION**

1、 General :

1.1 Switch rating: 5A 125/250VAC

1.2 Operating temperature range: -25°C~85°C

1.3 Preservative temperature range: -25°C~85°C

1.4 Storage humidity range: <70%RH

2. Performance

2.1 Electrical characteristics

Items		Test conditions	Criteria
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 stabilization 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.	Refer to individual product drawing
2.1.2	Insulation resistance	Spec. voltage (Refer to 2.3 item of spec. drawing) 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. voltage is applied between the terminals.	Refer to individual product drawing
2.1.3	Dielectric withstand in voltage	Spec. voltage (Refer to 2.4 item of individual product drawing) shall be applied across terminals and frame for one minute.	There shall be no breakdown.

**SPECIFICATION**

Items		Test conditions	Criteria
<b>3. Mechanical characteristics</b>			
3.1	Free Position	Position of switch plunger or actuation when on external force is applied.	Refer to individual product drawing
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.	Refer to individual product drawing
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.	Refer to individual product drawing
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.	There shall be no sign of damage mechanically and electrically.
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.	
<b>4. Soldering characteristics</b>			
4.1	Hand soldering	Use a soldering iron of 30 watts, controlled at 350~360°C approximately 3 seconds 1 time while applying solder.	(1)A new uniform coating of solder shall cover a minimum of 90% of the surface being immersed. (2)There shall be no defects in appearance or in the mechanical functions.

**SPECIFICATION**

Items	Test conditions	Criteria
<b>5. Durability characteristic:</b>		
5.1	Mechanical life  Without loading Operating speed : 120 cycles/minute Push force : maximum value of operating force twice Life: 1,000,000 cycles	After test: (1)Contact resistance: 1 ohm Max. (2)Insulation resistance: 10M ohm Min. (3)Bounce: 5m sec. Max. (4)Withstand voltage: AC1000V, 1 minute (5)Operating force: 30% of initial value (6) There shall be no defects in appearance or in the mechanical functions.
	Electrical life  which the load of 5A 250VAC    5A 250VAC Operating speed : 10 cycles/minute  Push force : maximum value of operating force twice Life: 10,000 cycles	
<b>6Special Requirements</b>		
6.1 Hazardous Substance Management: Follow our environmental requirements: Hazardous Substance.		
<b>7. Marks explanation</b>		
7.1 There should be “SM5” marks.		
7.2 “NC, NO and C” discriminating signs of terminals should be carved on the upper housing and be clear.		
7.3 There should be “5A 125/250VAC” rating and certification marks on upper housing. ( Refer to individual product drawing)		
<b>8. Packing explanation</b>		
8.1 100pcs for one case		
<b>9.Quantity records of delivered goods</b>		
9.1 Package boxes or package bags should be attached labels		
<b>10. Application Notes:</b>		
10.1 All parts of the switch can not be dissolved before soldering.		
10.2 Switches can not be blown with air gun or cleaned with a solvent after soldering.		

**SPECIFICATION**

**Page 5/5**

11. Incoming inspection declaring:

11. 1 You must comply with the following principles in the process of the incoming inspecting and using our products, if not, we won't be liable for any damages from it.

11. 2 The requirement of the incoming inspection must meet the product's specification that have been affirmed and signed by you. If the following things appear in the process of the incoming inspection, the use is restricted, please feed back us in time.

11. 3 The products that are attached or stuck by the unqualified labels;

11. 4 In the process of the incoming inspection, the following main function parameters must be checked and they must meet the specification. If the sum of the badness rate is more than 1% in the process, the use is restricted, please feedback us in time.

Operating Force: (Refer to individual product drawing)

Pre-travel: (Refer to individual product drawing)

Initial Contact Resistance: (Refer to individual product drawing)

Soldering ability:  $235 \pm 5^{\circ}\text{C}/3\text{S}$ , the covering rate of tin is more than 90%;

Function and action: the operation that the direction of switch operation is vertical with the up-surface of button isn't disabled;

11. 5 If the serious packaging disrepair of products appears in the process of the incoming inspection, please refuse accepting them and feed back us in time.

11. 6 Operating requirement: the direction of switch operating is vertical with the up-surface of button;

11. 7 If your incoming inspection is careless and it arose that the badness rate of your producing process is more than 1%, we won't be liable for the damage.

11.8 An unopened package is valid for six months in storage beginning from the dates marked on the goods labels.

Please mind this expiration duration; meanwhile an opened package should be sealed for storage. Moreover if your replace your labels with ours, please be mindful of our original label info as a tracking lead.

11.9 Storage condition: a clean and ventilated warehouse without corrosive gas.