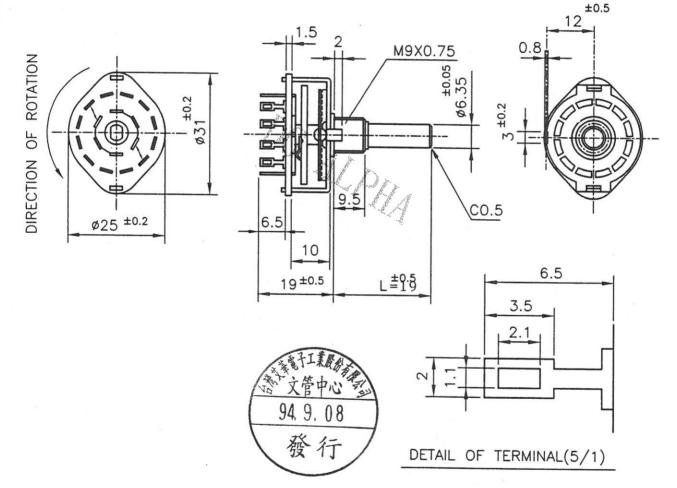
#### ROTARY SWITCH MODEL SR2511F-0206-(L)R0B-E9-S-W SPECIFICATIONS Rating AC125V 0.3A Contact Resistance 50 $m\Omega$ Max. Insulation Resistance DC500V-100 MΩ Min. Withstand Voltage AC500V-1 Minute $1.0\pm0.5 \text{ Kg-cm}$ Rotation Torque Sizes (m.m) As Following Drawings



NOTE: 1. TOLERANCES UNLESS OTHERWISE SPECIFIED: ±0.4mm

2. ACCESSORY PARTS: M9 HEXAGON NUT ONE PIECE &

WASHER ONE PIECE

3. TIMING: SHORTING

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TAIWAN ALPHA ELECTRONIC CO., LTD.



# Specification Rotary switch SR25XXF

DOC. No: Rev. A

Date:
Author: 何建志

Approved: 王茂松

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# **Specification**

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#### 1. TEST CONDITIONS

Standard test conditions shall be 5-35°C in temperature and 45-85% RH in humidity. Should any doubt arise in judgment test shall be conducted at  $20\pm2$ °C and  $65\pm5$ % RH.

### 2. OUTSIDE DIMENSION

Append drawing.

#### 3. MECHANICAL PERFORMANCE

Item	Test Condition	Specification		
3.1 Operating force	Operation temperature:- $10^{\circ}$ C $\sim +70^{\circ}$ C	1.0±0.5kgf-cm		
	Storage temperature:- $40^{\circ}\text{C} \sim +85^{\circ}\text{C}$			
	storage temperature, 10 0 100 0			
3.2 Control strength	A static load of 1000gf-cm shall be	N/A		
B	applied in the operating direction and			
	tensile direction of the unit for one			
	minute.			
3.3 Terminal strength	A static load of 1000gf-cm shall be	N/A		
8	applied to the tip of the terminal in a	7		
	desired direction for one minute.			
	The number of tests shall be one per			
	terminal.			
3.4 Control wobble	Shall be measured by applying a static	Less than 1 mm		
	load of 100gf-cm to the tip of control			
	unit.			
3.5 Soldering	Regarding preheating, the entire flow	More than 90% of the dipped		
	duration should not exceed 2 minutes,	part shall be covered by solder		
	and soldering surface temperature			
	( undersurface of PCB ) shall be			
	settled within 100°C.			
	Temperature of solder 260±5°C			
	Duration of dipping 4±0.5 seconds			



#### ALPHA

## **Specification**

Rotary switch

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SR25XXF

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Item

Test Condition

Requirement

3.6 Soldering heat resistance

resistance

Flow soldering condition:

to be performed in  $4\pm0.5$  seconds

within 260±5°C

Manual soldering condition:

to be performed in 3±0.5 seconds Max

within 350±5°C

No abnormalities shall be observed in appearance and operation shall be assured.

3.7 Shaft stopper strength:

More than 5kgf-cm

3.8 Bushing mount strength

9kgf-cm MIN.

**ELECTRICAL PERFORMANCE** 

Item

**Test Condition** 

Requirement

4.1 Rating

N/A

AC125V 0.3A

4.2 Contact resistance

Shall be measured at 1KHz±200Hz

(Max 20mV, Max 50mA) or 5V DC,

1A by a voltage drop method

Less than  $50m\Omega$ 

4.3 Insulation resistance

Shall be measured by applying

500V DC, between all terminals and between the terminal and the frame

for 1 minute  $\pm$  5 seconds

More than  $100M\Omega$ 

4.4 Withstand voltage

500V AC (50~60Hz, 2mA)

Shall be applied between all terminals and between the terminal and frame

No function damage or breakdown.

for one minute

#### 5. **DURABILITY**

5.1 Operating life under no load

10,000 cycles of operation shall be performed continuously at a rate of 15-20 cycles per minute without load. Contact resistance: less than  $200 \text{m}\Omega$ Insulation resistance:



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After operating life test, shall be in accordance with the following specifications.

more than 50MΩ Withstand Voltage: 250V AC per one minute Operating force: less than +10%,-30% for initial operating force

Approved: 王茂松

Item

**Test Condition** 

Requirement

5.2 Operating life under load

10,000 cycles of operation shall be performed continuously at a rate of 15-20 cycles per minute with resistive load of AC125V 0.3A

After operating life test, shall be in accordance with the following specifications.

Contact resistance : less than  $500 m\Omega$ 

Other specifications are the same as operating life under no load.

#### 6. NOTE

Terminals top side is covered by flux resist resin.

#### 無鉛焊錫與保管條件共通規格書

#### Common Specification of Lead-Free Soldering and Storage conditions

以下焊錫條件以可變電阻置於單層 1.6mm 厚度之印刷電路板上測試爲基準.

The specification below is based on testing results of 1.6mm thickness single layer printed circuit board.

1. 自動或半自動機台焊錫條件:

For Automated or Semi-Automated Soldering Equipments:

**1.1** 使用發泡式且比重 **0.82** 以上的助焊劑,發泡高度以印刷電路板厚度一半爲標準,且助劑不能流入可變電阻基板表面及印刷電路板表面。

Flux of 0.82 specific gravity, applied by foam fluxer, shall be used. Foam head shall be limited to the height which is half thickness of printed circuit board to be soldered. No flux should be allowed to run up onto resistive element board of potentiometer and the surface of printed circuit board.

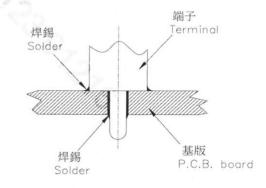
- 1.2 預熱時間不超過兩分鐘,焊錫接面 (即印刷電路板底) 最高預熱溫度不超過 100°C。 Regarding preheating, the entire flow duration should not exceed 2 minutes, and soldering surface temperature (undersurface of PCB) shall be settled within 100°C.
- 2. 手工焊錫、自動或半自動機台焊錫不得超過一回。
  Regardless of soldering facility and method, solder dipping or solder smearing must not be carried out more than 1 time.
  - 2.1 焊錫注意事項:

Caution for soldering:

如圖所示,請避免 PCB 上層表面有焊錫 Please avoid soldering on upper surface of P.C.B. as shown.

3. 保管條件(Storage conditions):

產品需儲存在原始的包裝,以及保持常溫 常濕、避免陽光直射、遠離任何腐蝕性氣 體.產品需盡快完全地使用完,建議最慢不



要超過交貨後6個月.產品經拆封後,全部的數量都需迅速地使用完.

The products shall be stored in the original packaging and kept at room temperature and humidity, out of direct sunlight, and away from any and all corrosive gas. The products shall be completely used as soon as possible, but no longer than 6 months from the date of delivery. Once product packaging is opened, the complete quantity of such products shall be promptly used.