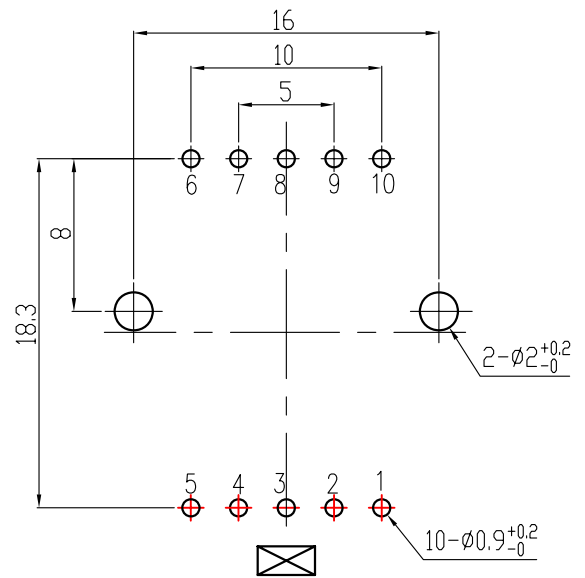
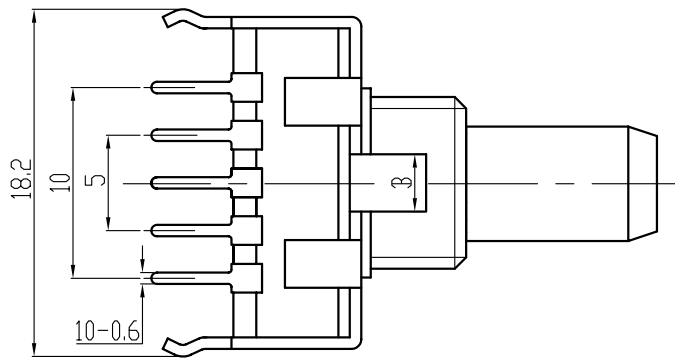
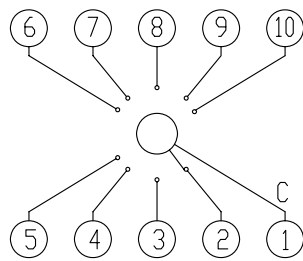


SHAFT SHOWN IN FULL C.C.W POSITION



(STOPPER)  
P.C.B MOUNTING HOLE DETAIL



30° 单刀

01	-	-	04	-	-
00	ORIGINAL DRAWING	2016. 03. 19	03	-	-
.ISSU.	REVISION	DATE	02	-	-
TOL. UNLESS OTHERWISE SPEC.			深圳明佳创新电子有限公司 MODEL: S17021XACH1-1-9-15FQ7P-000		
BASIC DIMENSIONS		TOL.			
DSGD.	CHKD.	APPD.	L≤10	±0.3	DRAWING NO: MJ-S17-0001
	SCALE	-	10<L	±0.5	
	UNIT	mm	100≤L	±0.8	
			ANGLE	±5°	

# S17 系列规格书

## S17 SERIES SPECIFICATION

### 1. 一般事项 General

#### 1-1. 适用规格 Scope

本规格书适用于 17 型开关。

This specification applies to 17mm size switch

#### 1-2. 标准状态 Standard atmospheric conditions

除另有规定外，测量应在以下状态下进行：

Unless otherwise specified, the standard range of atmospheric conditions for making measurements and test is as following limits:

温度 Ambient temperature : 15°C to 35°C

相对湿度 Relative humidity : 25% to 85%

气压 Air pressure : 86kpa to 106kpa

如果对在上述所提到的条件中所做的实测值有疑问的话，应使用以下条件进行测量：

If doubt arises on the decision based on the measured values under the above-mentioned Conditions, the following conditions shall be employed:

温度 Ambient temperature : 20±1°C

相对湿度 Relative humidity : 63% to 67%

气压 Air pressure : 86kpa to 106kpa

#### 1-3. 使用温度范围

Operating temperature range : -10°C to +70°C

#### 1-4. 保存温度范围

Storage temperature range : -30°C to +80°C

### 2. 构造 Construction

#### 2-1. 尺寸 Dimensions

见所附成品图 Refer to attached drawing

### 3. 额定值 Rating

#### 3-1. 额定电压

Rated voltage :DC 16V

#### 3-2. 最大额定电流（阻抗负载）

Maximum operating current (resistive load) 0.3A

### 4. 电气性能 Electrical Characteristics

项目 ITEM	条件 CONDITIONS	规格 SPECIFICATIONS	
		极数 Poles	段数 Sections
4-1. 开关电路接入点数 Switch circuit and Number of pulse	详见所附成品图 Refer to attached drawing	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9
4-2. 绝缘阻抗 Insulation resistance	在端子和支架间施加电压 500V DC 1 分钟。 Measurement shall be made under the condition which a voltage of 500V DC 1 min is applied between individual terminals and frame	100MΩ 以上 100MΩ Min	
4-3. 耐电压 Dielectric strength	在端子和支架间施加电压 AC500V 电压 1 分钟 A voltage of 500V AC shall be applied for 1 minute between individual terminals and frame	不得有绝缘破坏 Without arcing or breakdown	
4-4. 端子间接触阻抗 Contact resistance	出力信号处于 ON 时安定状态条件下测定 Measurement shall be stable condition which a Output signal is ON	寿命前：50mΩ 以下 寿命后：1Ω 以下	

# S17 系列规格书

## S17 SERIES SPECIFICATION

5. 机械性能 Mechanical Characteristics		
5-1.转换角度 Changeover angle		<input type="checkbox"/> 30° ±3° (one-step operating angle) <input type="checkbox"/> 45° ±3° (one-step operating angle) <input type="checkbox"/> 75° ±3° (one-step operating angle)
5-2.旋转力矩 Rotational torque		10-70mN.m.(100-700gf.cm)
5-3.轴的推拉强度 Push-pull Strength of shaft	在轴端,沿轴向施加 10Kg 的静负荷力推和拉各 10 秒钟(产品焊锡固定在 PCB 上.) Push and pull static load of 8Kg shall be applied to the shaft in the axial direction for 10s. (After soldering of the PCB board)	轴向虚位间隙 0.4 以内 Shaft play in axial direction 0.4 Max
5-4.端子强度 Terminal strength	在端子的先端施加 5N(500gf)的力 1 分钟. A static load 5N(500gf) be applied to the tip of terminals for 1 minute in any direction.	端子无损坏,无过度的松度,允许变形. Without damage or excessive looseness of terminals. Terminal bend is permitted.
5-5.轴套螺纹紧固强度 Bushing Nut Tighten Strength		7.0Kgf.cm 以上 7.0Kgf.cm Min
5-6.止动强度 End stop strength		6.0Kgf.cm 以上 6.0Kgf.cm Max
5-7.轴向间隙 Shaft play in axial direction		0.4mm 以下 0.4mm Max
5-8.轴摆动 Shaft wobble	在距离轴顶端 5MM 处,沿径向瞬间施加 50mN.m(500gf.cm)的力测试 A momentary load of 500gf.cm should be applied at the point 5mm from the tip of the shaft in a direction perpendicular to the axis of shaft.	0.7*L/30mm p-p 以下(L:指安装平面到轴的柄端的距离.) 0.7*L/30mm p-p Max L :Distance between mounting surface and measuring point on the shaft
5-9.轴的回转方向摆动 Shaft play in rotational wobble	用角度板测定. Testing by angle board.	5° 以下 5° Max
6. 耐久性能 Endurance Characteristics		
项目 ITEM	条件 CONDITIONS	规格 SPECIFICATIONS
6-1.回转寿命 Rotational life	在无负荷条件下轴以 600~800 周/小时速度回转,24 小时连续 5000~8000 次. The shaft of switch shall be rotated at speed of 600~1000 cycles /H without electrical load, after with measurements shall be made (5000 to 8000 continuous cycles for 24 hours.)	10000±200 周 10000±200 cycles per below 100gf.cm 尚余有轻微定位感. 端子间接触阻抗 1Ω 以下 Detent feeling has to remains Contact resistance 1Ω Max
6-2.耐湿性 Damp heat	温度 40±2℃,湿度 90~95%的恒温恒湿槽中放置 96±4 小时后,在常温、常湿中放置 1.5 小时后测试. The switch shall be stored at temperature of 40±2℃ with relative humidity of 90~95% for 96±4 in a thermostatic chamber. And the switch shall be subjected to standard atmospheric conditions for 1.5H, After which measurements shall be made.	所有项应满足初期规格 Specifications in clause All items is shall be satisfied

# S17 系列规格书

## S17 SERIES SPECIFICATION

6-3.耐热性 Dry heat	温度 $80 \pm 3^{\circ}\text{C}$ , 的恒温箱中放置 $96 \pm 4$ 小时, 常温、常湿放置 1.5 小时后测试。 The switch shall be stored at a temperature of $80 \pm 3^{\circ}\text{C}$ for $96 \pm 4\text{H}$ in a thermostatic chamber, And then the switch . Shall be subjected to standard atmospheric conditions for 1.5H, After which measurements shall be made.	所有项应满足初期规格。 Specifications in clause all items is shall be satisfied
6-4.低温特性 Cold	温度 $-40 \pm 3^{\circ}\text{C}$ 的恒温箱中放置 $96 \pm 4$ 小时, 常温、常湿放置 1.5 小时后测试。 The switch shall be stored at a temperature of $-40 \pm 3^{\circ}\text{C}$ for $96 \pm 4\text{H}$ in a thermostatic chamber, And then the switch . Shall be subjected to standard atmospheric conditions for 1.5H, After which measurements shall be made.	所有项应满足初期规格。 Specifications in clause all items is shall be satisfied
6-5.焊锡耐热性 Resistance to soldering heat	槽焊 Dip soldering . 使用基板: $t=1.6\text{mm}$ 的单面覆铜板。 Printed wiring board :single-sided copper clad laminate board with thickness of 1.6mm. 预热: 基板表面温度 $100^{\circ}\text{C}$ 以下, 时间 1 分钟以内。 Preheating: 1.Surface temperature of board: $100^{\circ}\text{C}$ or less 2.Preheating time :within 1 minute 焊接: 温度 $260 \pm 5^{\circ}\text{C}$ 或以下, 时间 3 秒以内。 Soldering :solder temperature: $260 \pm 5^{\circ}\text{C}$ or less Immersion time :within 3S 手焊 Manual soldering 温度 $350^{\circ}\text{C}$ 以下, 时间 3 秒以内。 Bit temperature of soldering iron: $350^{\circ}\text{C}$ less than Application time of soldering iron :within 3S	不得有绝缘体的破损、变形、接触无异常 Electrical characteristics shall be satisfied No mechanical abnormality
6-6.焊锡性 Solderability	端子在 $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ 的温度的焊锡槽内浸锡 $3\text{s} \pm 0.5\text{s}$ 。 The terminals shall be immersed into solder bath at $260^{\circ}\text{C}$ for $3\text{S} \pm 0.5\text{S}$ .	浸渍面须有 75% 以上焊锡附着 A new uniform coating of solder shall cover 75% minimum of the surface being immersed

### 7. 包装部分 Packing Portion

项目 ITEM	条件 CONDITIONS			规格 SPECIFICATIONS	
7-1.包装方式 Packing	使用泡沫盒和纸箱包装。 Packed in foamed plastic plate carton			每盒 100PCS, 每箱 10 盒 共计: 1000PCS/箱 Put 100PCS products into foamed plastic plate, then pack 10 plates into a carton, total 1000PCS/carton	
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