

客户 (Customer) : _____

发行编号: 2022031501

发行日期: 2022.03.12

发行区分: 新规 改定

规格承认书

SPECIFICATION FOR APPROVAL

产品名称: 摇杆开关 YT1

贵司型号: _____

敝司型号: YVD01-BGS2-DAT1

接受印

兹证明此份材料已经收到。

ACKNOWLEDGEMENT

WE ACKNOWLEDGE RECEIVING THIS DOCUMENT.

MONTH / DAY / YEAR

DATE: / /

G. MGR	LEADER	CHECKED	SIGNED

浙江键富电子有限公司
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品名	摇杆开关 YT1	型号	YVD01-BGS2-DAT1	1/10

1. General Specification 基本说明

1.1 Scope 范围 This specification covers requirements for min toggle switch.此规范含盖迷你型摇柄开关要求

1.2 Operating Temperature Range 使用温度范围

-20 to+85°C(normal humidity, normal press.) 正常湿度, 标准压力

1.3 Storage Temperature Range 保存温度范围

-40 to+85°C(normal humidity, normal press.)

1.4 Test Conditions 测试条件

Tests and measurements shall be made in the following standard conditions unless otherwise specified: 测试和计量按下列标准条件除非特殊说明

Normal temperature (temperature 5 to 35°C) 标准温度

Normal humidity (relative humidity 45 to 85%) 正常湿气

Normal pressure (pressure 860 to 1060 mbars) 标准压力

In case any question arises from the judgment made, tests shall be conducted in the following conditions:

Temperature (20±2°C) 温度

Relative humidity (65±5%) 相对湿度

Pressure (860 to 1060 mbars) 压力

2. Type Of Actuation 动作类型

finger shake 手指拨动

3. Maximum Ratings DC 28 V 0.4 VA 最大额定值

DC 20 mV 1 μA 最小额定值

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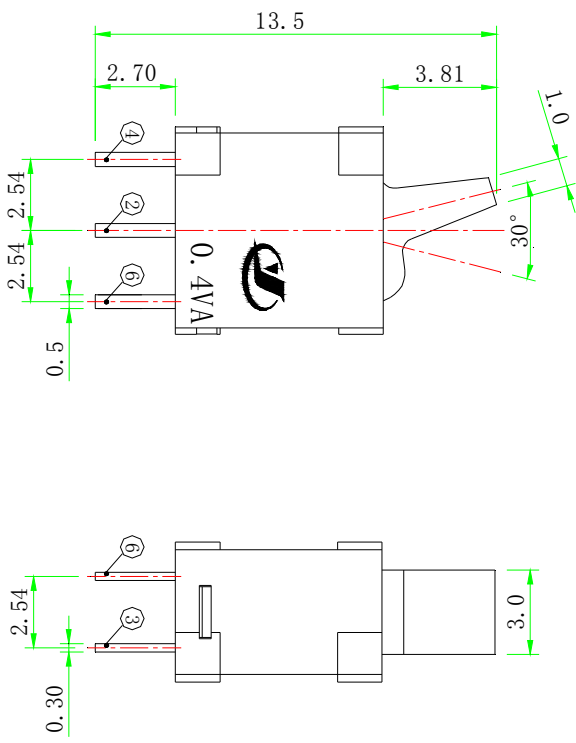
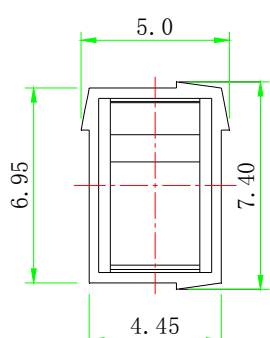
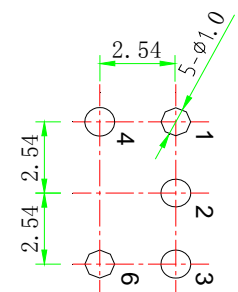
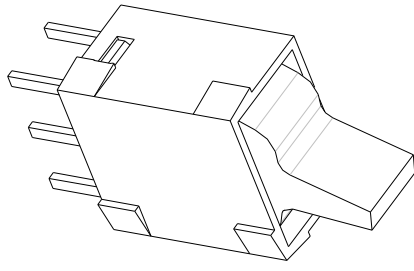
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5. 外形、结构:

5.1 外形图:



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ROHS
Compatible

REFERENCE DRAWING

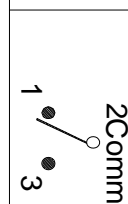
SPECIFICATION

- Rating: DC 24V 0.4VA Max
- Contact resistance: 100mΩ MAX
- Insulation resistance: 500MΩ Min
- Dielectric strength: 250VAC/min
- Operating life: 10,000 cycles

REV (版本)	MARK (标记)	DESCRIPTION (描述)	DATE (日期)	APPROVED (批准)

model no.	switching p
UR	on none on
term comm.	2-3 open 2-1

Schematic



UNSPECIFIED TOLERANCE (未指定的公差)	TOLERANCE
ANGULAR (角度)	±0.5°
4 < L ≤ 16	±0.4
L ≤ 4	±0.3
L ≤ 4	±0.2

(序号)	PART NAME (零件名)	QTY (数量)	MATERIAL (材料)	REMARK (备注)
5	Stem	1	Nylon	
4	Actuator	1	Nylon	
3	Contact	1	Copper alloy	
2	Base	1	Nylon	
1	Terminal	1	Copper alloy	

DRAWN	DATE	SCALE	ITEM	REMARK (备注)
XY LIU	2022.03.14	1:1	产品类型	Toggle Switch
审核	日期	比例	零件号	摇杆开关
批准	日期	视图	型号	YVD01-BGS2-DAT1
	日期	UNIT: mm	DWG. NO	
		单位	图号	

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6. General Specification 性能				
6.1 电气的性能				
Item 项目		Test Condition 测试条件	Requirements 要求	
6.1.1	Contact Resistance 接触电阻	Measurements shall made following application of 1KHZ and between individual terminals.. 在端子与端子之间用 1 千赫小电流接触电阻仪测量	100mΩ 以下	
6.1.2	Insulation Resistance 绝缘电阻	Measurements shall be made following application of DC250V potential between terminals and between individual terminals and frame for one minute.在端子与端子之间,端子与外壳之间施加 DC250V,一分钟	500MΩ 以上	
6.1.3	Dielectric withstanding voltage 电气耐压	AC 250 V (50Hz or60Hz) shall be applied between terminals and between individual terminals and frame for one minute. 在端子与端子之间,端子与外壳之间施加 AC250V(50HZ-60HZ)	There shall be no breakdown. 无击穿、闪烁现象	

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6.2 机械的性能

Item 项目		Test Condition 测试条件	Requirements 要求
6.2.1	Actuating Force 动作力	<p>As shown in the figure, the direction of each arrow is the measurement push button operation. 如图所示,各箭头方向即为测定推钮操作方向之力量</p> <p>YT </p> <p>YR </p>	<p>YT:5N max</p> <p>YR:90g~120g</p>
6.2.2	Resistant to solder heat 耐焊锡热	<p>Please test according to the following conditions 请按以下条件进行测试:</p> <p>(1)Solder temperature 焊锡温度: 270°C Max</p> <p>(2)welding time 焊接时间: ≤3 S Max</p> <p>(3)Number of soldering operations, up to 2 焊锡操作之次数,最多 2 次 (PCB 厚度为 1.6mm)</p>	<p>Item 6.1.1~6.1.3</p> <p>Item 6. 2.1</p>
6.2.3	Waterproof 防水性	<p>Place the switch on the FC-40 test heated to 70° C Test the solution for 5 minutes and observe the bubbles.将开关置于加温至 70° C 之 FC-40 测试溶液 5 分钟, 观察气泡情形。</p>	<p>Item 6.1.1~6.1.3</p> <p>Item 6. 2.1</p>

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6.3 使用耐久性能

Item 项目	Test Condition 测试条件	Requirements 要求
6.3.1 Operating Life 动作寿命	Measurements shall be made following the test set forth below:按下列条件进行寿命试验 (1) ①YT:DC 28V 0.4VA resistive load. DC 28V 0.4VA 阻性负载 ②TR:DC 20V 0.1A resistive load. DC 20V 0.1A 阻性负载 (2)Rate of operation:15to20 operations per minute 动作频率:15-20 次/分钟 (3)Cycles of operation: 40000 cycles 动作次数: 40000	Item 6.1.2 Item 6.1.3
6.3.2 Moisture Resistance 耐潮湿	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for one hour before measurements are made: 样品按下列条件进行耐潮湿试验,试验后在正常温度和湿度条件下放置 1 小时后测定 (1) Temperature: $40 \pm 2^{\circ}\text{C}$ 温度 (2) Relative humidity: 90 to 95% 相对湿度 (3) Time: 48hours 时间 Water drops shall be removed. 擦除水珠	Contact resistance: <u>100</u> m Ω Max. 接触电阻 Insulation resistance : <u>10</u> M Ω Min. 绝缘电阻 Item 6.1.3 Item 6.2.1
6.3.3 Low Temperature Resistance 耐低温	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for one hour before measurements are made: 样品按下列条件进行耐低温试验,试验后在正常温度和湿度条件下放置 1 小时后测定 (1)Temperature: $-30 \pm 2^{\circ}\text{C}$ 温度 (2) Time: 48hours 时间 Water drops shall be removed. 擦除水珠	Item 6.1.1~6.1.3 Item 6.2.1
6.3.4 Heat Resistance 耐热	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for one hour before measurements are made: 样品按下列条件进行耐热试验,试验后在正常温度和湿度条件下放置 1 小时后测定 (1)Temperature: $85 \pm 3^{\circ}\text{C}$ 温度 (2) Time: 48hours 时间	Item 6.1.1~6.1.3 Item 6.2.1

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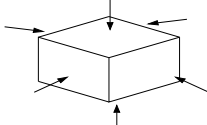
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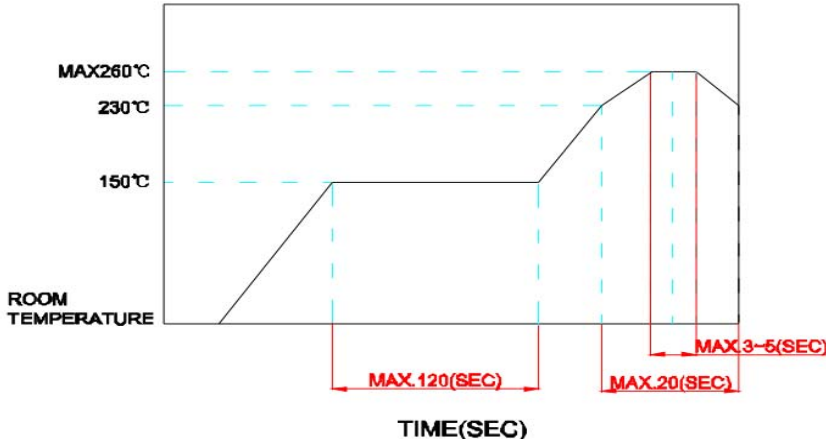
型号

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Item 项目	Test Condition 测试条件	Requirements 要求
6.3.5 Impact Shock Resistance 抗冲击	<p>Measurements shall be made following the test set forth below: 按下列条件进行冲击试验</p> <p>(1)Acceleration:80g 加速度</p> <p>(2)Cycles of test :3 cycles each in 6directions, for a total of 18cycles 试验次数:每个方向 3 次,6 个方向共 18 次</p> 	<p>Item 6.1</p> <p>Item 6. 2.1、 6.2.2</p>

7. 焊接条件:

Item 项目	Recommended conditions 推荐条件
7.1 Hand soldering 手工焊接	<p>Please practice according to bellow conditions:</p> <p>(1)Soldering temperature :270℃Max</p> <p>(2)Continuous soldering time:≤3 S Max</p> <p>(3)Capacity of soldering iron:≤60 W Max</p> <p>请按以下条件进行焊接:</p> <p>(1)焊锡温度: 270℃Max</p> <p>(2)连续焊接时间: ≤3 S Max</p> <p>(3)电烙铁的功率: ≤60 W Max</p>
7.2 Automatic flow soldering 自动焊接	<p>For the product of SMT , type solder according to the following conditions 对于 SMT 产品, 请按以下条件进行焊接</p>  <p>Caution: the condition mentioned above is a temperature on the PWB surface on which parts are mounted. There are cases where PWB temperature greatly differs from switch's surface temperature depending on PWB material, size, thickness, etc. The switch's surface temperature shall not allowed to exceed 260℃ 注意: 以上提及的条件是零部件上 PWB 表面的温度, 由于 PWB 的材料、尺寸、厚度等不同, PWB 从开关表面获得的温度也会有很大产不同, 因此, 千万小心不要让开关表面温度超过 260℃</p>

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8. Other Precautions 其他注意事项: (1) Flux on the P.C.B board, do not stick to the switch itself. 在 P.C.B 板面上之助焊剂, 不要黏到开关本身 (2) Not washable to the switch itself. 不可清到开关本身				