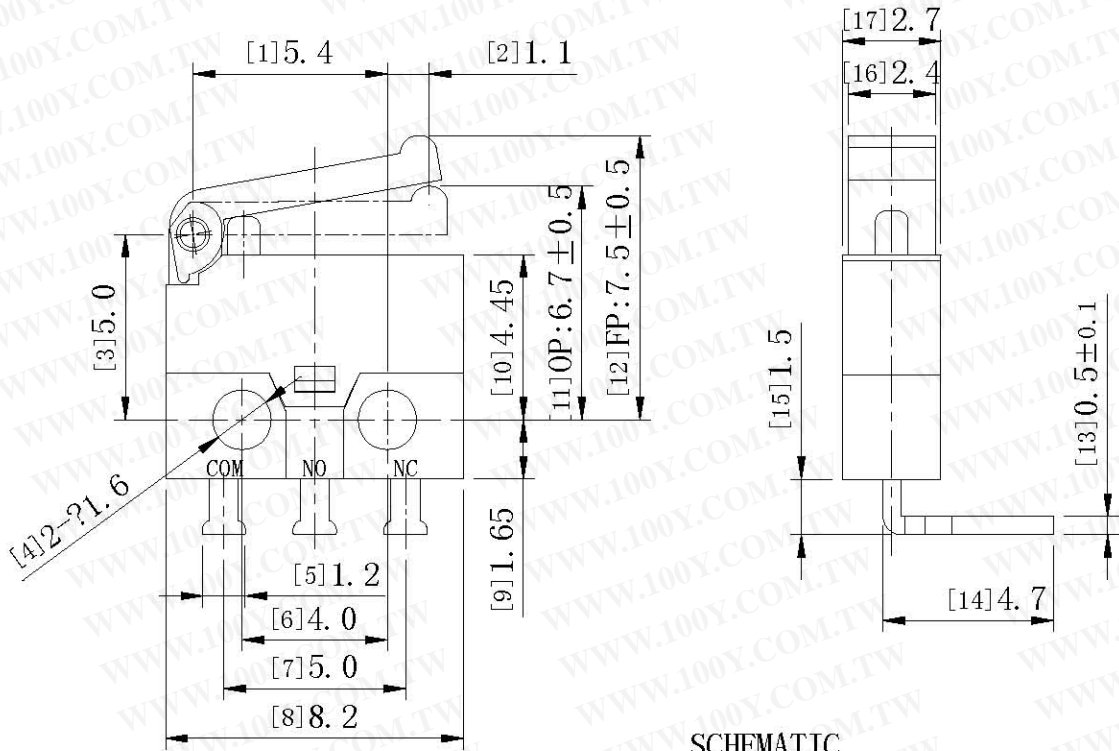




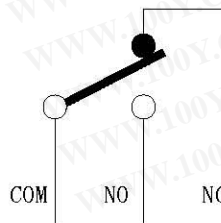
RoHS

SWITCH TYPE	Micro Switches	MODEL NO.	DS037-01D1-30
<b>1. Functional spec.</b>			
1.1 Rated Voltage	DC6V	1.6 Free Position	7.5 ± 0.5mm
1.2 Rated Current	300mA	1.7 Operating Position	6.7 ± 0.5mm
1.3 Contact Resistance	≤ 50mΩ (Initial value)	1.8 Position Travel	
1.4 Operating Force	10-40gf	1.9 Return Force	
1.5 Bounce Time		1.10	
<b>2. Reliable Rating</b>			
2.1 Mechanical Life	100,000 cycles	2.5 Soldering Technic	Hand Soldering
2.2 Electrical Life	50,000 cycles	2.6 Operating Temper	-25°C - +85°C
2.3 Insulation Resistance	≥ 100MΩ DC250V	2.8 Ambient Humidity Used	< 85%RH
2.4 Withstand Voltage	AC250V 1minute	2.8	

**3. Dimension Drawing**



**SCHEMATIC**



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Revision	Description		Date	Revisor
Drawing No.	C/0		Tolerance	±0.2
Drawing Model.	SPECIFICATION OF STANDARD TYPE		Unit	mm
Prepared	ZhenTong, Lai	Reviewed	HaiTao, You	Approved
			Cheng,Hsieh, Cheng-Hsiang	Effective date
				20121114

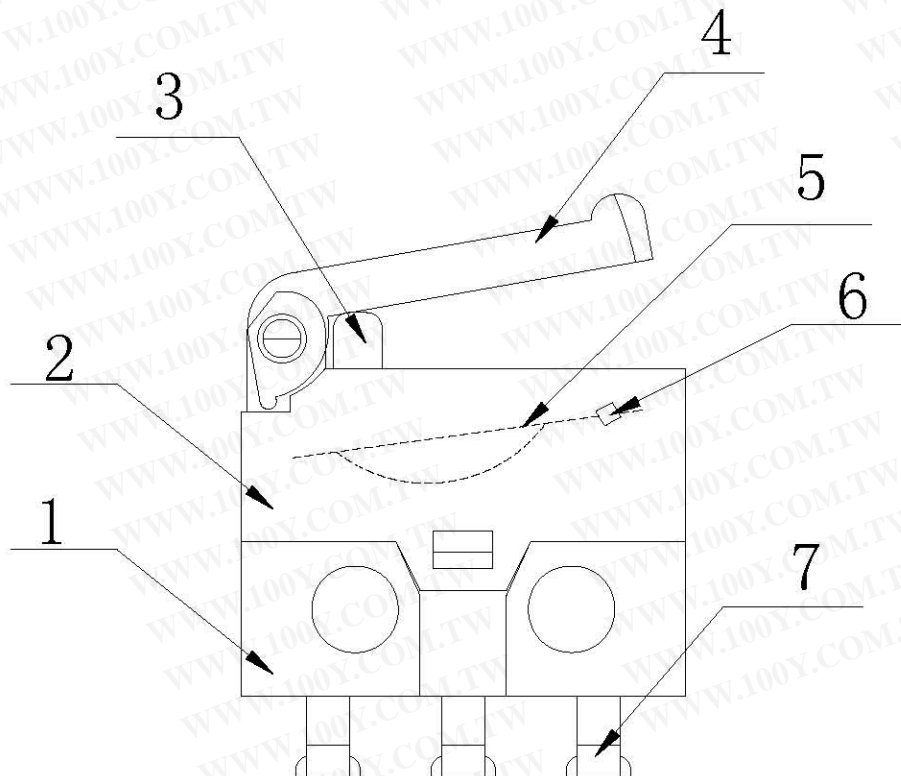
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Material list 材料清单

NO.	Part Name 品名	Q'TY 数量	Generic Class 材质	Remark 备注
1	Base 底座	1	Nylon	
2	Case 上盖	1	Nylon	
3	Button 按钮	1	Nylon	
4	Lever 压柄	1	Nylon	
5	Spring Plate 弹片	1	C1720	
6	Contact 接点	1	Ag	
7	Terminal 端子	3	C2680	

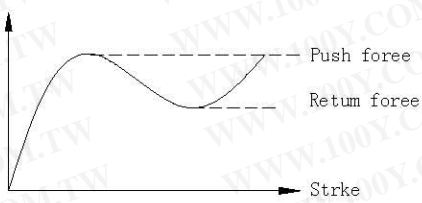
Structure chart:

结构示意图:



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1. General(一般特性) :					
1.1 Switch rating:		DC6V 0.3A (规格: DC6V 0.3A)			
1.2 Operating temperature range		-25°C~85°C (操作温度范围: -25°C~85°C)			
1.3 Preservative temperature range		-30°C~85°C (储存温度: -30°C~85°C)			
1.4 Storage humidity range		<85%RH (储存湿度: <85%RH)			
2.Performance 功能参数					
2.1 Electrical characteristics(电气特性)					
Items 项目		Test conditions 测试条件		Criteria 标准	
2.1	Contact resistance 接触电阻	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. 测试端子两端适用静负载值是按钮操作力的两倍。 采用精度为 2 mΩ 高稳定度线性毫欧表并在 DC5V, 0.1A 的条件下测量端子两端接触电阻。		Refer to individual product drawing 参考规格图纸	
2.2	Insulation resistance 绝缘电阻	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 . 采用绝缘电阻测试仪, 分别在相互绝缘的所有端子之间及各接线端子与外露的非金属零件之间加载规格电压 (参见规格图 2.3 项), 持续 1 分钟测试绝缘电阻。		Refer to individual product drawing 参考规格图纸	
2.3	Dielectric withstand in voltage 耐压强度	Spec. voltage (Refer to 2.4 item of individual product drawing) shall be applied across terminals and frame for one minute. 在端子两端之间加载规格电压 (参见规格图 2.4 项), 持续时间为 1 分钟。		There shall be no breakdown 无电击穿等异常.	

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Items 项目		Test conditions 测试条件			Criteria 标准	
3.Mechanical characteristics 机械特性:						
3.1	Free Position 自由位置	Position of switch plunger or actuation when on external force is applied. 开关不受外力时之位置。			Refer to individual product drawing 参考规格图纸	
3.2	Operating Position 动作位置	Position of switch plunger or actuator at which point contacts snap from normal to operated position. Note that the case of flexible of adjustable actuators. 开关操动件受到外力后, 由自由状态切换到动作状态的动作位置。 (注意防止盖片变形或按钮倾斜现象。)			Refer to individual product drawing 参考规格图纸	
3.3	Operating force 操作力	Push by recommended operating condition 操作力度 			Refer to individual product drawing 参考规格图纸	
3.4	Release Force 回弹力	Placing the switch such that the direction of switch operation is vertical, the force for the button to return to release position from operating position shall be measured. 沿开关操动件运动的直线方向, 操动件由动作状态位置回复到自由位置时所受的力。			Refer to individual product drawing 参考规格图纸	
3.5	Stop strength 静负荷强度	A static load of 500gf Max shall be applied in the direction of stem operation for a period of one minute. 沿按钮的操作运动方向施加 500gf Max 静负荷力度测试时间为 1 分。			No damage (Electrical and mechanical) 无机械、电气性能损坏	

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Items 项目		Test conditions 测试条件			Criteria 标准	
4. Soldering characteristics 焊接性能						
4.1	Hand soldering 手工焊	Use a soldering iron of 30 watts, controlled at 350-360°C approximately 3 seconds while applying solder. 焊接时需 30 瓦烙铁, 控制于 350-360°C, 大约 3 秒钟条件下进行。			There shall be no defects in appearance or in the mechanical functions. 没有出现任何外观和机械功能上的损伤。	
5. Durability characteristic:耐久性能						
5.1	Mechanical life 机械寿命	(1) Without loading 无负载 (2) Operating speed : 60 cycles/minute 操作频率: 60 次/分钟 (3) Push force : maximum value of operating force twice 推动力: 操作力的最大规格值的两倍 (4) Life: 100,000 cycles 寿命: 100,000 次			After test: (1) Contact resistance: 1 ohm Max. (2) Insulation resistance: 10M ohm Min. (3) Bounce: 5m sec. Max. (4) Withstand voltage: AC600V, 1 minute (5) Operating force: 30% of initial value (6) There shall be no defects in appearance or in the mechanical functions.	
5.2	Electrical life test 电气寿命测试	(1) which the load of DC6V 0.3A 负载为 DC6V 0.3A (2) Operating speed : 10 cycles/minute 操作频率: 10 次/分钟 (3) Push force : maximum value of operating force twice 推动力: 操作力的最大规格值的两倍 (4) Life: 50,000 cycles 寿命: 50,000 次			试验后: (1) 接触电阻: 1 欧姆以下 (2) 绝缘电阻: 10 兆欧姆以上 (3) 灵敏度: 5 毫秒以下 (4) 耐压强度: AC250V, 1 分钟 (5) 操作力度: 测试初始值的 30% 以内 (6) 没有出现任何外观和机械功能上的损伤。	
6. Packing explanation 包装说明						
6.1 1000 pcs for one bag, 10 bags for one small box, 6 small boxes for one big box. 1000 pcs 为 1 袋, 10 袋为 1 小盒, 6 小盒为一箱。						
7. Quantity records of delivered goods 出货证明记录						
7.1 Package boxes or package bags should be attached labels or identifiers of Model No., Quantity and Quality Pursuing No. 成品包装箱或包装袋上应附有产品型号、数量及质量追踪号的标签或标识。						
7.2 There shall be quality records of inspection and test in package boxed. 出货产品包装批、出货批应附有产品检验、试验之质量证明记录。						

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8. 使用注意事项: (Application Notes:)

8.1 避免储藏于高温、潮湿及腐蚀的场所。

(Avoid storing the products in a place at high temperature, high humidity and in corrosive gases.)

8.2 开关焊接前各零件不能被溶化。

(All parts of the switch can not be dissolved before soldering.)

8.3 开关焊接后不能用气枪吹或用溶剂冲洗。

(Switches can not be blown with air gun or cleaned with a solvent after soldering.)

9. 验收注意事项: (Incoming inspection declaring:)

我司交付贵司产品, 在验收、使用进程中必须遵循以下原则, 否则造成一切损失, 我司概不负责。

(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.)

9.1 必须依据我司事先送贵司经贵司签认承认书相关规格要求验收, 验收有以下情况请不予使用, 退回我司。

(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 ,we will take back of all.)

9.1.1 附有或粘贴有检验不合格标识的产品;

(The products that are attached or sticked by the unqualified labels;)

9.1.2 依承认书规格要求检验下列主要功能参数, 必须符合要求, 如在贵司验收过程有下述不良超过 1%, 请贵司不要使用, 及时知会我司并退回。

①操作力: 参照规格书

②操作位置: 参照规格书

③初始状态接触电阻: 参照规格书

④可焊性 (235±5°C 3S, 覆锡率 90%以上)

⑤功能动作: 产品正压无动作失效;

(In the process of the incoming inspection, he 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, we will take back of all.)

①Operating Force

②Operating Position

③Initial Contact Resistance

④Soldering ability: 235±5°C/3S, the covering rate of tin is more than 90%;

⑤ Function and action: the operation that the direction of switch operation is vertical with the up-surface of button isn't disabled;

9.1.3 贵司在验收过程发现外包装严重破损, 请不予收货, 直接退还我司。

(If the serious packaging disrepair of products appears in the process of the incoming inspection, please refuse accepting them and return them to us directly.)

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9.2 正确使用: (The requirement of operation :)

9.2.1 使用压动方向: 必须正压。

(Operating requirement: the direction of switch operating is vertical with the up-surface of button;)

9.2.2 因贵司进料验收漏失, 导致超过 1%以上制程不良损失, 我司不负责任。

(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.)

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