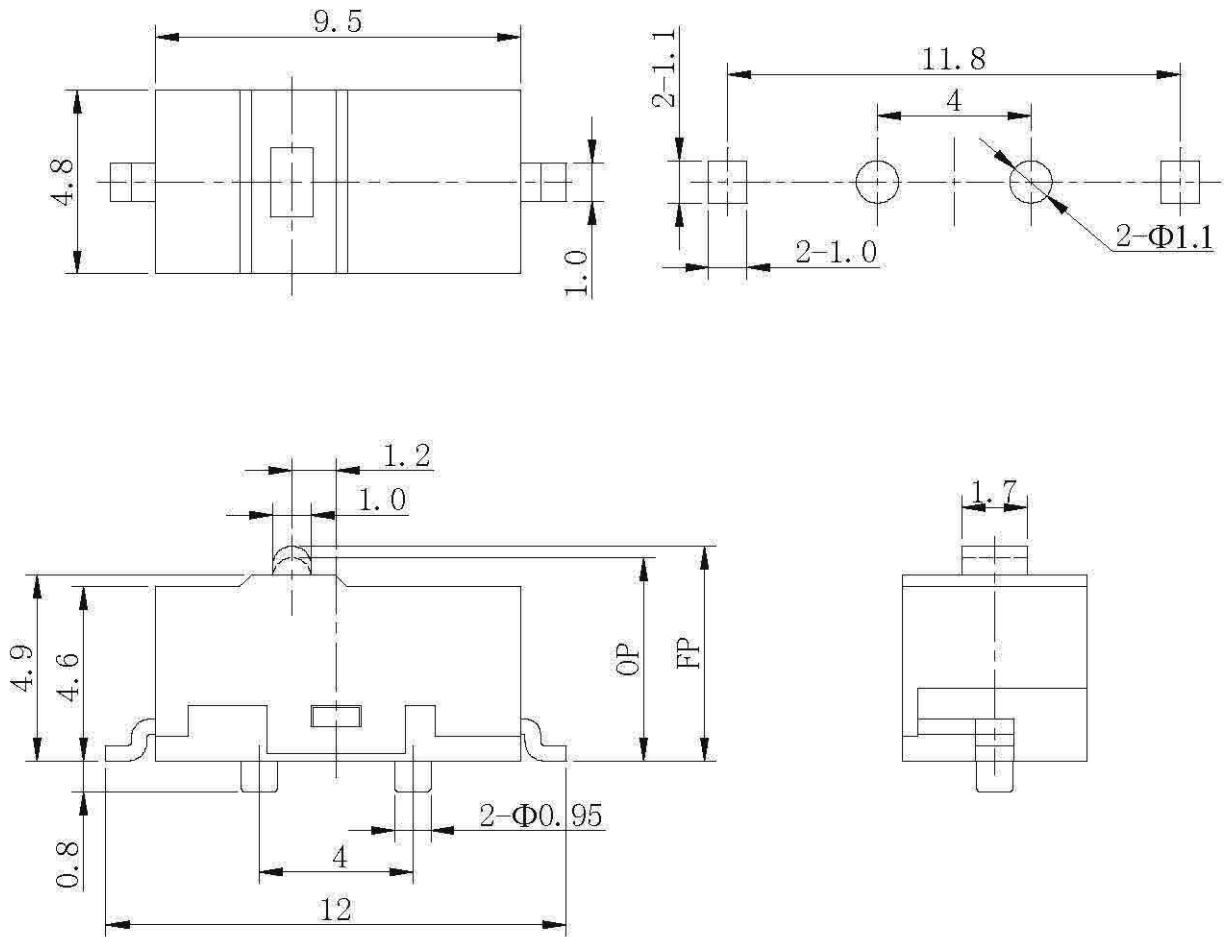


类 型	小型微动开关	品 名	SDS130-00M-70-4
1. 功能规格			
1.1额定值 DC48V 0.1A/AC125V 0.1A		1.5自由位置 (FP)	5.7±0.2mm
		1.6动作位置 (OP)	5.3±0.2mm
1.2接触电阻 (CR)	≤300mΩ (初始值)	1.7行程 (PT)	
1.3操作力 (OF)	50~100gf	1.8灵敏度 (BT)	≤5ms
1.4回弹力 (RF)		1.9	
2. 可靠度参数			
2.1机械寿命	1,000,000 cycles	2.5焊接工艺	手工焊, 回流焊
2.2电气寿命	1,000,000 cycles	2.6操作温度	-10° C - +60° C
2.3绝缘电阻 (IR)	≥100MΩ DC250V (初始值)	2.7储存湿度	<85%RH
2.4耐压强度 (WV)	AC250V 1 minute (初始值)	2.8	

3. 尺寸规格图



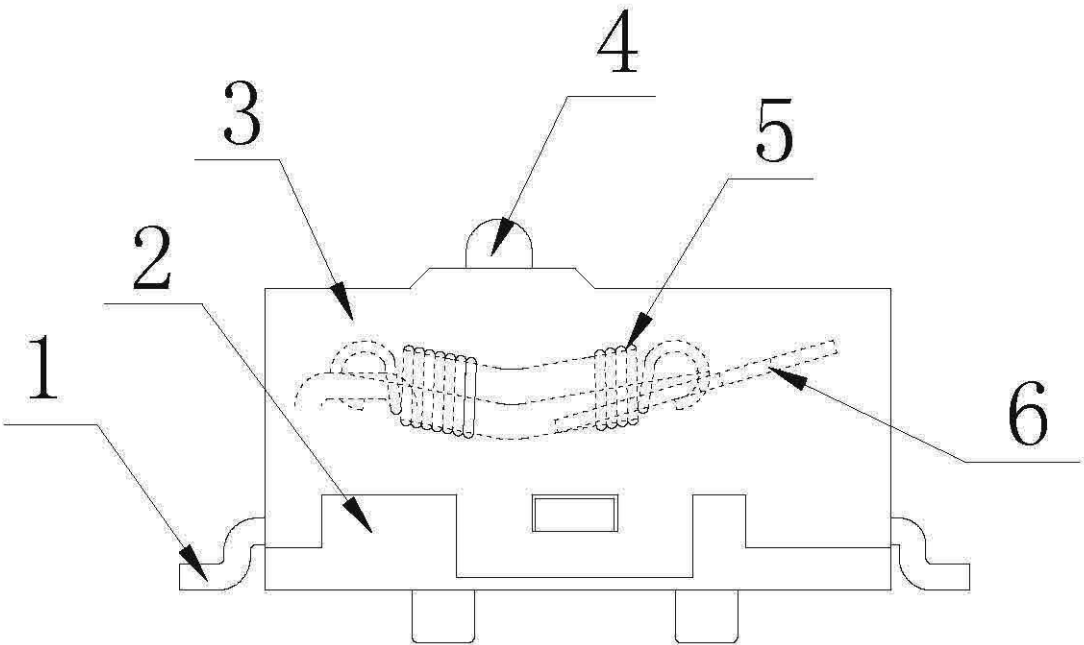
版 本	修订内容					日期	修订人
文件编号				第C版 第0次修订		一般公差	±0.2
文件名称	成品规格书					单 位	mm
拟制	刘石凤	审核	董四龙	批准	吴万涛	生效日期	20071108

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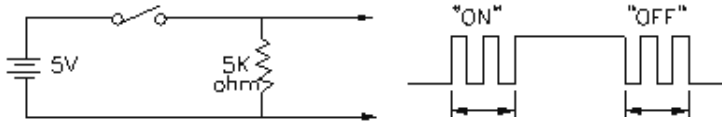
SWEETA PRODI CTS CORPORATION

SERIES 系列		MICRO SWITCHES(SDS130)		Issuance date 日期:		20060801	
Document No.文件编号		DIC/PE130-020		Edition 版本		C	
Material list 材料清单							
NO.	Part Name 品名		Q'TY 数量		Generic Class 材质		SGS No. SGS 报告编号
1	Terminal 端 子		2		C2680		GZ0701004459/CHEM
2	Base 底 座		1		Nylon		GZ0707104488/CHEM
3	Case 盖 片		1		PBT		EC405726400
					PLASBLACK		EC405726800
4	Button 按 钮		1		PBT		EC405726400
					COLOR POWDER		GZ0703039748/CHEM
5	Spring 弹 簧		1		SUS304		GZ0703039993/CHEM
6	Change Plate 切换片		1		C5210		EC405312300

Structure chart:  
结构示意图:



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1、General(一般特性)：								
1.1 Switch rating:		DC48V 0.1A/AC125V 0.1A（规格：DC48V 0.1A/AC125V 0.1A）						
1.2 Operating temperature range		-10℃~60℃（操作温度范围: -10℃~60℃）						
1.3 Preservative temperature range		-25℃~80℃（储存温度: -25℃~80℃）						
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	
2.1.1	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 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. 在按钮上施加两倍操作力的静负荷值，采用精度为 2 mΩ 高稳定度线性毫欧表，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	
2.1.2	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 voltage which a voltage of spec. 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	
2.1.3	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.	
2.1.4	Bounce 灵敏度	<p>Lightly striking the center of the button at a rate encountered in normal use (3 to 4 operating per sec.) bounce shall be tested at “ON” and “OFF”.</p> <p>以 3-4 次/秒的频率施加正常力于按钮上，操作之动作则可测出“ON”、“OFF”之功能。</p> <div></div>					5ms max	

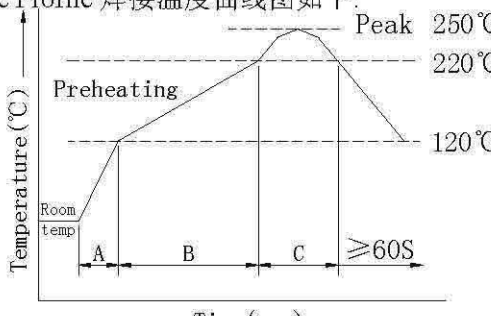
# 喜威達企業股份有限公司

## SWEETA PRODI CTS CORPORATION

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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 plunge 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	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. 置开关于垂直状态, 渐增力度使按钮至动作位置为最大值之力度。				Refer to individual product drawing 参考规格图纸
3.4	Terminal Strength 端子强度	Placing the switch such that the direction of switch operation is vertical, a static load of 1kgf Max shall be applied to the tip of the terminal in the direction of operation for one minute. 置开关于垂直状态, 动作端子顶端接线端强度 1kgf Max, 时间为 1 分钟。				There shall be no sign of damage mechanically and electrically. 机械性能、电气性能无损害现象。
3.5	Button Strength 按钮强度	Placing the switch such that the direction of switch operation is vertical, a static load of 1kgf Max shall be applied to the center of the button in the direction of button operation for one minute. 置开关于垂直状态, 直接动作按钮, 驱动强度 1kgf Max, 时间为 1 分钟。				
4. Soldering characteristics 焊接性能						
4.1	Hand soldering 手工焊	Use a soldering iron of 30 watts , controlled at 380℃ approximately 3 seconds 1 time while applying solder. 焊接时需在 30 瓦烙铁, 控制于 380℃, 大约 3 秒钟一次的条件下进行。				(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. (1)覆锡性能达到浸入表面的 90%以上 (2)没有出现任何外观和机械功能上的损伤。

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Items 项目		Test conditions 测试条件				Criteria 标准																														
4.2	Reflow soldering 回流焊	<p>When applying reflow soldering, the peak temperature of the reflow Oven should be set to 250℃max. 当使用回焊炉进行焊接时，最高温度设置为 250℃。</p> <p>Condition for soldering (Reflow &amp; Non-washable Type) Temperature Profile 焊接温度曲线图如下:</p>  <table data-bbox="493 837 1139 1128"><thead><tr><th></th><th>Components size</th><th></th><th>Unit</th></tr></thead><tbody><tr><td>A</td><td>Temp.rise gradient 温度上升</td><td>40S</td><td>sec</td></tr><tr><td rowspan="2">B</td><td>Heating time 加热时间</td><td>60-120S</td><td>sec</td></tr><tr><td>Heating temperature 加热温度</td><td>120-220℃</td><td>℃</td></tr><tr><td rowspan="3">C</td><td>Time over 220℃ 超过220℃的时间</td><td>60-90S</td><td>sec</td></tr><tr><td>Peak temperature 最高温度</td><td>250</td><td>℃</td></tr><tr><td>Peak-temp.hold time 耐最高温时间</td><td>瞬间</td><td>sec</td></tr><tr><td colspan="2">Soldering 焊接次数</td><td>1</td><td>times</td></tr></tbody></table>					Components size		Unit	A	Temp.rise gradient 温度上升	40S	sec	B	Heating time 加热时间	60-120S	sec	Heating temperature 加热温度	120-220℃	℃	C	Time over 220℃ 超过220℃的时间	60-90S	sec	Peak temperature 最高温度	250	℃	Peak-temp.hold time 耐最高温时间	瞬间	sec	Soldering 焊接次数		1	times	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。	
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### 5. Durability characteristic:耐久性能

5.1	Mechanical life 机械寿命	<p>(1) Without loading 无负载</p> <p>(2) Operating speed : 120 cycles/minute 操作频率: 120 次/分钟</p> <p>(3) Push force : maximum value of operating force twice 推动力: 操作力的最大规格值的两倍</p> <p>(4) Life: 1,000,000 cycles 寿命: 1,000,000 次</p>	<p>After test:</p> <p>(1)Contact resistance:1 ohm Max.</p> <p>(2)Insulation resistance: 10M ohm Min.</p> <p>(3)Bounce: 5m sec. Max.</p> <p>(4)Withstand voltage: AC250V, 1 minute</p> <p>(5)Operating force: 30% of initial value</p> <p>(6)There shall be no defects in appearance or in the mechanical functions.</p>
	Electrical life 电气寿命	<p>(1) Operating speed : 10 cycles/minute 操作频率: 10 次/分钟</p> <p>(2) Push force : maximum value of operating force twice 推动力: 操作力的最大规格值的两倍</p> <p>(3) which the load of DC48V 0.1A 负载为 DC48V 0.1A Life: 1,000,000 cycles 寿命: 1,000,000 次</p>	<p>试验后:</p> <p>(1)接触电阻:1 欧姆以下</p> <p>(2)绝缘电阻:10 兆欧姆以上</p> <p>(3)灵敏度: 5 毫秒以下</p> <p>(4)耐压强度: AC250V, 1 分钟</p> <p>(5)操作力度: 测试初始值 30%以内</p> <p>(6) 没有出现任何外观和机械功能上的损伤。</p>

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6. Special Requirements 特别要求					
6.1 Hazardous Substance Management: Follow environmental requirements: Hazardous Substance,DIC/WI/G506. 危害物质管理：遵循环境物质规范：危害物质 DIC/WI/G506。					
7. Marks explanation 标志说明					
7.1 There should be trademark on case. 每个产品盖片上应有商标。					
8. Packing explaintion 包装说明					
8.1 1000 pcs for one bag,4 bags for one small box,6 small boxes for one big box. 1000 pcs 为 1 袋，4 袋为 1 小盒，6 小盒为一箱。					
9.Quanlity records of delivered goods 出货证明记录					
9.1 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。					
9.2 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。					