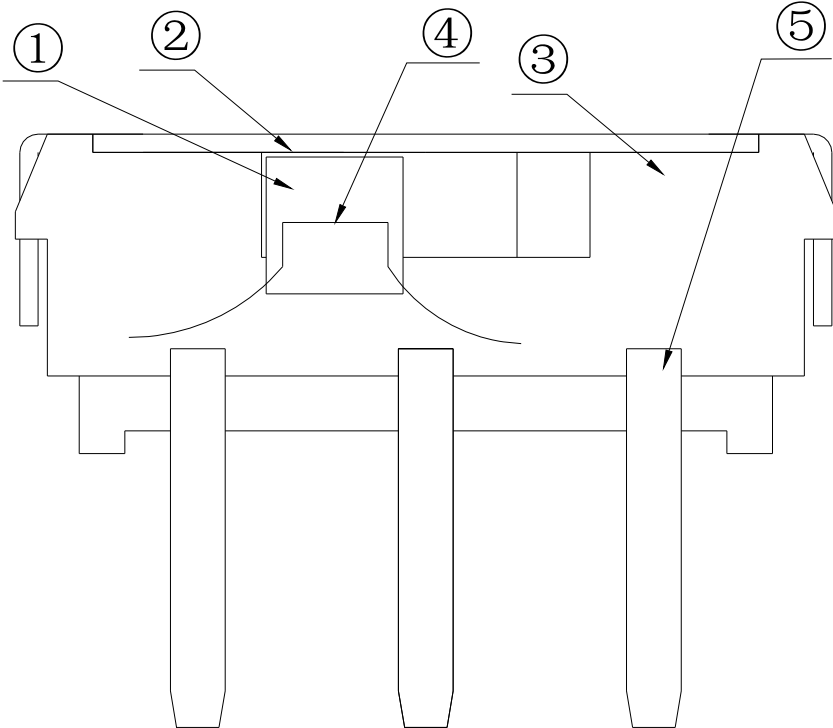


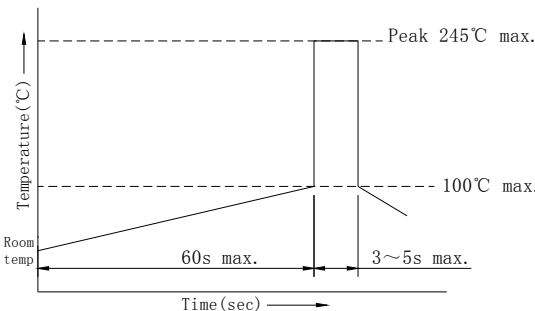
SWEETA PRODUCTS CORPORATION				RoHS			
类 型		滑动开关		品 名		MSL031-01P-22	
1. 功能规格							
1.1额定电压		DC6V		1.6自由位置 (FP)			
1.2额定电流		0.3A		1.7动作位置 (OP)			
1.3接触电阻 (CR)		≤70mΩ (初始值)		1.8行程 (PT)		2.0±0.2mm	
1.4操作力 (OF)		250±150gf		1.9回弹力 (RF)			
1.5灵敏度 (BT)				1.10總行程 (TT)			
2. 可靠度参数							
2.1机械寿命		10,000 cycles		2.5焊接工艺		手工焊、波峰焊	
2.2电气寿命		10,000 cycles		2.6适用温度		-15℃ - +65℃	
2.3绝缘电阻		≥100MΩ DC500V		2.7适用湿度		<85%RH	
2.4耐压强度		AC500V 1 minute		2.8			
3 尺寸规格图							
版 本		修订内容				日 期	
文件编号		第C版 第0次修订				一般公差	
文件名称		成品规格书				单 位	
拟制		赖振通		审核		游海涛	
				批准		谢成祥	
						生效日期	
						20130226	

SERIES 系列		SLIDE SWITCHES(MSL031)		Issuance date 日期:		20060801		
Document No.文件名称		DIC/PE031		Edition 版本		C	Page 页码	1/5
NO.	Part Name 品名		Q'TY 数量	Generic Class 材质		SGS report No. SGS 报告编号		
1	Stem 型物		1	NYLON				
2	Case 外壳		1	SUS301				
3	Base 底座		1	NYLON				
4	Spring Plate 弹片		2	C5210				
5	Terminal 端子		6	C2680				

structures chart:
结构示意图:



SERIES 系列		SLIDE SWITCHES(MSL031)		Issuance date 日期:		20060801	
Document No.文件名称		DIC/PE031		Edition 版本		C	Page 页码 2/5
1、General(一般特性)：							
1.1 Switch rating:		DC 6V, 0.3A		(规格: DC 6V, 0.3A)			
1.2Operating temperature range		-15℃~65℃		(操作温度范围: -15℃~65℃)			
1.3 Preservative temperature range		-30℃~70℃		(储存温度: -30℃~70℃)			
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 stem, measurements shall be made between the terminals. Measurement shall be made with a contact resistance meter for 2mΩ precision under the condition which a voltage of DC 5V 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 2mΩ 高稳定度线性毫欧表，在 DC 5V 0.1A 的条件下测量端子两端的接触电阻。				Refer to individual product drawing. 参考规格图纸	
2.1.2	Insulation resistance 绝缘电阻	Spec. voltage (Refer to the 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 Spec. voltage is applied between the terminals . 采用绝缘电阻器仪分别在相互绝缘的所有端子之间各接线端子与外露的非金属零件之间加载规格电压（参见规格图纸 2.3 项）持续 1 分钟测试绝缘电阻值。				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 the 2.4 item of spec. drawing)shall be applied across terminals and frame for one minute. 在端子两端之间加载规格电压（参见规格图纸 2.4 项），持续时间为 1 分钟。				There shall be no breakdown 无电击穿等异常.	
3.Mechanical characteristics 机械特性							
3.1	Operation 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 stem, the maximum load for the stem to come to operating position shall be measured. 置开关垂直状态，渐增力度使型物至动作位置为最大值之力度.				Refer to individual product drawing. 参考规格图纸	

• SERIES 系列		SLIDE SWITCHES(MSL031)		Issuance date 日期:		20060801														
Document No.文件名称		DIC/PE031		Edition 版本		C	Page 页码	3/5												
Items 项目		Test conditions 测试条件					Criteria 标准													
3.2	Terminal strength 端子强度	A static load of 500gf Max shall be applied to the tip of the terminal for 30 sec. in any direction. 在任意一个方向的先端加上 500gf Max 力度测试, 时间为 30 秒。					Electrical characteristics shall be satisfied without damage or excessive looseness of terminals. 在端子中没有裂开, 松动等异常, 满足于机械, 电器性能。													
3.3	Displacement of actuator(Knob) 柄强度	A static load of 500gf Max shall be applied to the terminal for 15 Sec. In any direction. 在型物前端任意一个方向加 500gf Max 力度测试, 时间为 15 秒。																		
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℃ approximately 3 seconds 1time while applying solder. 焊接时需 在 30 瓦烙铁, 控制于 350~360℃, 大约 3 秒钟 1 次条件下进行。					A new uniform coating of solder shall cover a minimum of 90% of the surface being immersed. There shall be no defects in appearance or in the mechanical functions. 覆锡性能达到浸入表面的 90% 以上 没有出现任何外观和机械功能上的损伤。													
4.2	Wave soldering 波峰焊	<p>When applying wave soldering, the peak temperature of the wave Oven should be set to 245℃max. 当使用低波炉进行焊接时, 最高温度设置为 245℃。</p> <p>ondition for soldering (Wave & Non-washable Type) Temperature Profile 焊接温度曲线图如下:</p> <div></div> <table><thead><tr><th>Items 项目</th><th>Condition 条件</th></tr></thead><tbody><tr><td>Preheating temperature 预热温度</td><td>Ambient temperature of the soldered surface of PC board. 100℃ max. P.C板上锡焊周围温度最高为100℃</td></tr><tr><td>Preheating time 预热时间</td><td>60s max. 最高60秒</td></tr><tr><td>Soldering temperature 锡焊温度</td><td>245℃ max. 最高245℃</td></tr><tr><td>Continuous dipping time 连续的浸渍时间</td><td>3~5s max. 最长时间为3~5秒</td></tr><tr><td>Number of soldering 锡焊次数</td><td>2 times max. 最多2次</td></tr></tbody></table>					Items 项目	Condition 条件	Preheating temperature 预热温度	Ambient temperature of the soldered surface of PC board. 100℃ max. P.C板上锡焊周围温度最高为100℃	Preheating time 预热时间	60s max. 最高60秒	Soldering temperature 锡焊温度	245℃ max. 最高245℃	Continuous dipping time 连续的浸渍时间	3~5s max. 最长时间为3~5秒	Number of soldering 锡焊次数	2 times max. 最多2次	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。	
Items 项目	Condition 条件																			
Preheating temperature 预热温度	Ambient temperature of the soldered surface of PC board. 100℃ max. P.C板上锡焊周围温度最高为100℃																			
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SERIES 系列		SLIDE SWITCHES(MSL031)	Issuance date 日期:		20060801	
Document No.文件名称		DIC/PE031	Edition 版本	C	Page 页码	4/5
Items 项目		Test conditions 测试条件			Criteria 标准	
5. Durability characteristic:耐久性能						
5.1	Mechanical life 机械寿命	(1) Without loading 无负载 (2) Operating speed : 15 cycles/minute 操作频率: 15 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: 10,000 cycles 寿命: 10,000 次			After test: (1)Contact resistance: 1 ohm Max. (2)Bounce: 5m sec. Max. (3)Withstand voltage: AC500V, 1 minute (4)Operating force: 30% of initial value (5)There shall be no defects in appearance or in the mechanical functions.	
5.2	Electrical life 电气寿命	(1) which the load of 0.3A DC 6V 负载为 0.3A DC 6V (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: 10,000 cycles 寿命: 10,000 次			试验后: (1)接触电阻:1 欧姆以下 (2)灵敏度: 5 毫秒以下 (3)耐压强度:AC500V, 1 分钟 (4)操作力度: 测试初始值的 30%以内 (5)没有出现任何外观和机械功能上的损伤。	
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. Quality 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。						

SERIES 系列	SLIDE SWITCHES(MSL031)	Issuance date 日期:	20060801		
Document No.文件名称	DIC/PE031	Edition 版本	C	Page 页码	5/5
8. Application Notes: 注意事项					
<p>8.1 All parts of the switch can not be dissolved before soldering. 开关焊接前各零件不能被熔化。</p> <p>8.2 Switches can not be blown with air gun or cleaned with a solvent after soldering. 开关焊接后不能用气枪吹干或用溶剂去清洗开关。</p>					
9. Incoming inspection declaring: 验收注意事项					
<p>9.1 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. 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。</p> <p>9.2 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. 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。</p> <p>9.3 The products that are attached or stucked by the unqualified labels; 附有或粘贴有检验不合格标识的产品；</p> <p>9.4 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. 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。</p> <p>①Operating Force: (Refer to individual product drawing) 操作力：（参照规格图纸）</p> <p>②Pre-travel: (Refer to individual product drawing) 行程范围：（参照规格图纸）</p> <p>③Initial Contact Resistance: (Refer to individual product drawing) 初始状态接触电阻：（参照规格图纸）</p> <p>④Soldering ability: 235±5℃/3S,the covering rate of tin is more than 90%; 可焊性(235±5℃ 3S, 覆锡率 90%以上)</p> <p>⑤Function and action: the operation that the direction of switch operation is vertical with the up-surface of button isn't disabled; 功能动作:产品正压无动作失效；</p> <p>9.5 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. 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。</p> <p>9.6 Operating requirement: the direction of switch operating is vertical with the up-surface of button; 使用压动方向：必须正压。</p> <p>9.7 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. 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。</p>					