东莞市铭标电子科技有限公司

MINGBIAO ELECTRONICS CO.,LTD

承 认 书

APPROVE SHEET

客户名称 Customer:_____

品 名 Part name: Push switch

型 号 Part Number: PS5803

Design/Date	Check/Date	Review/Date	Approval/Date

贵公司承认印 Approal slgnatures

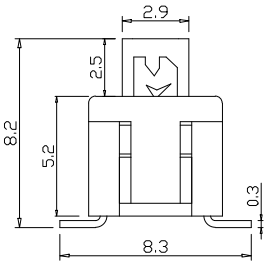
Approval/Date	Remark

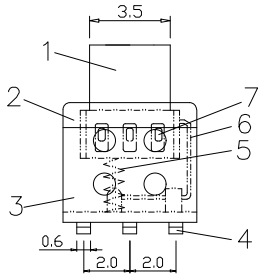
Send us a copy of reference , thank you! 日期 Date:

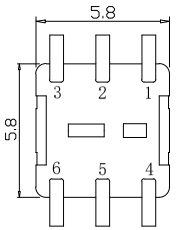
地址： 广东省东莞市长安镇沙头社区猫山东路 101 号

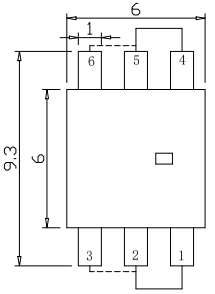
Add: DongguanCity,GuangdongProvince,Chang'an Town,Sand head community The cat shandong road,No.101

Ntel: 0769-81581583









常态 FREE 1-2,5-6

按下 PUSH 2-3,4-5

电 路 图

circuit diagram

1:SPECIFICATION

1、Rating：DC 30V 1.5A

2、Contact resistance：≤100mΩ

3、Insulation resistance：≥100MΩ DC500V

4、Withstand voltage：AC 250V(30Hz)/min

5、Insertion and extraction force：230±50gf

6、life test：10000 cycles

7、LCP料耐温260°

2:Did not note the size businesstrip:

1-5.0mm±0.10mm

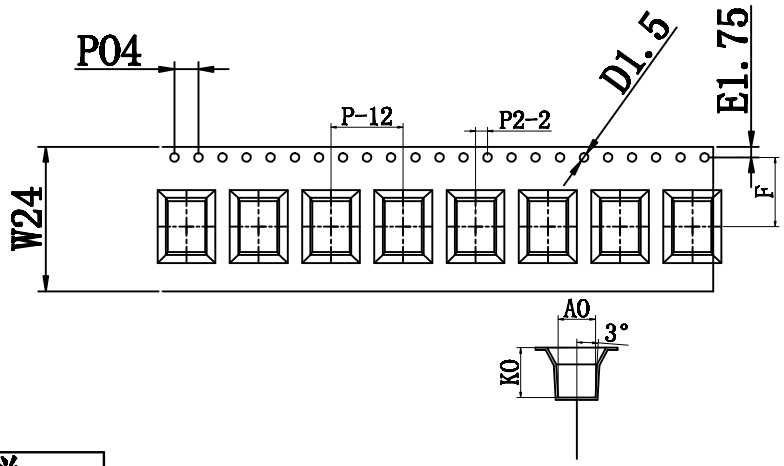
5.0-10.0mm±0.15mm

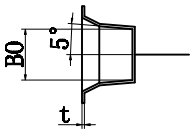
10.0-15.0mm±0.20mm

序 号	名 称	数量	材 料	备 注
7	接触夹	2	覆合银铜皮	
6	钩针	1	精密钢丝	
5	弹簧	1	碳素钢	
4	引脚	6	黄铜H62	镀 银
3	基座	1	LCP	
2	盖 板	1	LCP	
1	推 轴	1	LCP	

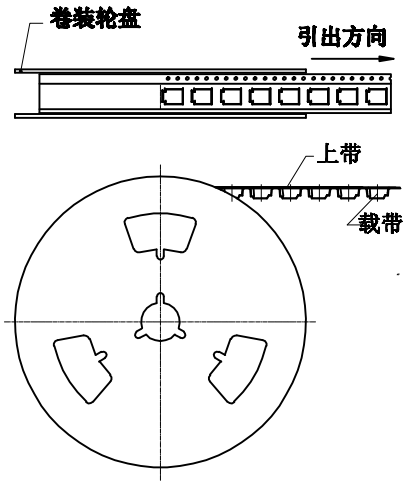
单位:MM	类型：轻触开关	型号：PS5803 5.8×5.8无锁开关	图幅：A4		第一页 共一页
			线性公差：±0.1	角度公差：±1.5°	比例：1:1	投影视角：3
设 计：	wlj	东莞市铭标电子科技有限公司 Ming Mark Electronic Technology Co. ,Ltd.			
审 核：	wlj				
批 准：					RoHS

标记	版本	更正记录	修订人	审核
△				
△				
△				





卷装示图仅供参考



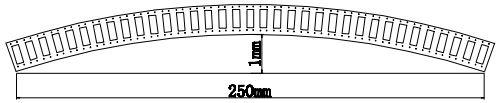
A-A

尺寸栏	
E	1.75±0.10
F	11.5±0.10
P2	2.00±0.10
□D	$1.50^{+0.10}_{0.00}$
Po	4.00±0.10
W	24.00±0.30
P	12.0±0.10
Ao	6.20±0.10
BO	8.50±0.10
KO	8.30±0.10
t	0.40±0.05

生产参数	
模　数	130 模
颗　数	1040颗
卷　轮	380 mm
包装数	1000颗

说明

1. 10个边孔的累计公差不能超过±0.2mm.
2. 材料规格：PS 白色料抗静电，厚度 0.40mm.
3. 15英吋卷轮卷装长度：12.48米，包装零件总颗数：1040颗，每盘实包颗数：1000颗
4. 所有尺寸设计参照EIA-481-C-2003。
5. 载带在250mm长度内最大弯曲不能超过1mm见上图



东莞市铭标电子科技有限公司
Ming Mark Electronic Technology Co. ,Ltd.

PS5803

5.8*5.8*8.2H 平头

客户:

单位:mm

页数	比例	版本
1/1	1:1	A0

1. 一般特性 General Characteristics

1.1 额定值（Rating Value）:DC12V　1A

1.2 工作温度（Work Temperature Range）:-10℃~70℃

1.3 存贮温度（Store Temperature Range）:-20℃~80℃

1.4 正常测试条件（未有特殊说明量测在以下条件进行）:

General test condition (Tests and measurements shall be made under the following standard conditions unless otherwise specified):

正常温度：5℃~35℃　　相对湿度：45%~85% RH　　气压：8,600~10,600 帕

Temperature:5℃~35℃　Relative humidity:45%~85%　Air pressure:8,600~10,600 pa

2. 产品外观及尺寸要求 Appearance & Dimension Requirement

2.1 产品外形结构紧凑，无配合不良

The structure of product is compact, and assembly of parts has no badness.

2.2 产品塑胶部件无严重缩水、披锋、欠注、斑点、破损或变形现象。

The plastic parts of product have no serious defects such as very serious shrink,scarcity,fleck,disrepair,transmutation,etc.

2.3 产品引脚和外壳无严重氧化、脏污、变形、毛刺或电镀不良。

Lead feet and shell have no serious defects such as oxidation,smudge,disrepair,burr,defects on plating.

2.4 开关操作顺畅，节奏感强，无明显卡塞现象，（自锁开关锁芯锁住后，允许导芯倾斜正负 2°）

Operating switch is unhindered,rhythmed,and there is not palpable clag.(After the keystoke is locked,it is normal that the keystoke tilt to one side plus or minus 2°)

2.5 产品结构及尺寸参见产品规格图纸。

Construction and dimensions：Refer to individual product drawing.

3. 电气特性 Electronic Characteristics

No.	项目 Item	测试方法 Test Method	测试设备 Equipment	特性要求 Requirements
3.1	接触电阻 Contact Resistance	在低电流（≤100A）条件下测试。 Measured at low current(100mA or less).	低电阻测试仪 Low Resistance Meter	100mΩ max
3.2	绝缘阻抗 Insulation Resistance	测试相邻引脚之间，引脚与外壳之间的绝缘阻抗（DC 250V）. Measurement shall be made between adjacent terminals,between terminal and shell(DC 250V).	绝缘测试机 Insulation Resistance Tester	100MΩ min
3.3	耐压测试 Dielectric Withstand Voltage	输入一定电压（50-60Hz,电压值 AC 500V）1 分钟，漏电流为 2mA，测试邻近端子间。 Apply certain voltage (50-60Hz,AC 500V) for 1 minute between ad jacent contacts of the connector with 2mA leakage sensitivity.	耐压测试机 Puncture Tester	没有绝缘破坏、电弧等异常。 No arcing,break down and damaging insulation.

4. 机械特性 Mechanical Characteristics

No.	项目 Item	测试方法 Test Method	测试设备 Equipment	特性要求 Requirements
4.1	操作力 Operation Force	逐渐施力操作开关按键，测量开关到达全部工作行程所需的最大操作力度。 Operate the keystoke of the switch and then increase press strength gradually,Measured maximum operation force while the travel of the switch is full.	测力计 Force Gauge	230±50gf
4.2	行程 Full travel	垂直操作开关按键，量测开关顶端最大移动距离。 Operate the keystoke of the switch vertically,the travel distance of keystoke moving from its free position to maximum moving distance shall be measurement.	游标卡尺 Vernier Caliper	1.5±0.2㎜

5. 可靠性测试 Reliability Trial

No.	项目 Item	测试方法 Test Method	测试设备 Equipment	特性要求 Requirements
5.1	可焊性试验 Solder ability Test	端子顶部被浸入焊锡炉中，温度为 220±10℃，时间 5±1 秒。 The top of the terminals shall be dipped in the solder bath at 220±10℃ for 5±1 seconds.	控制锡炉 Solder Stove	引脚至少 95%上锡 Ninety-five percent of terminals shall be dipped.
5.2	寿命试验 Operation Life	开关在寿命试验设备上以约 90 次/分的速度连续被操作，具体次数见规格图示。 Switch shall be operated continuously at about 90 cycles/min without load.	寿命试验机 Life Tester	寿命：10,000 次 实验后： 绝缘电阻：100MΩ Min 操作力：变化在±50%内 开关外观及结构无损坏。 Life test:10,000cycles After test: Insulation resistance: 100MΩ Min Operating force: Change should be within ±50% of specified value. No abnormalities shall be recognized in appearance and comstruction.

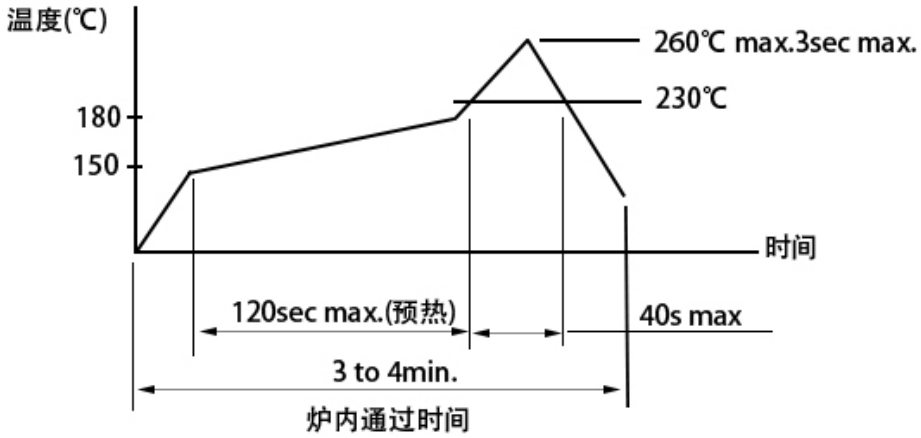
5. 可靠性测试 Reliability Trial

No.	项目 Item	测试方法 Test Method	测试设备 Equipment	特性要求
5.3	耐焊接热 Resistance to Soldering heat	端子焊接部分浸入焊炉，焊炉温度 220±10℃，焊接时间 5±1 秒。（焊接时不可于端子施加外力）。 Terminals shall be dipped in the solder bath at 220±10℃ for 5±1 seconds without additional force for terminals.	控温锡炉 Solder Stove	本体无变形，能满足于机械、电气性能。 Appearance should be not damaged,electrical and mechanical characteristics shall be satisfied.
5.4	耐高温测试 Resistance to Heat Test	放置在温度 200±5℃环境中 96 小时后，再置于正常条件下 1 小时后测定。 The switch shall be stored at a temperature of 80±2℃ for 96 hours,Measurements shall be made after it be subjected to the standard conditions for 1 hour.	高低温试验机 High & Low Temperature Tester	外观，机械及电气性能均符合要求。 Appearance,electrical and mechanical characteristics shall be satisfied.
5.5	耐低温测试 Resistance to Cold Test	放置在温度－2±2℃环境中 96 小时后，再置于正常条件下 1 小时后测定。 The switch shall be stored at a temperature of －2±2℃ for 96 hours,Measurements shall be made after it be subjected to the standard conditions for 1 hour.	高低温试验机 High & Low Temperature Tester	外观，机械及电气性能均符合要求。 Appearance,electrical and mechanical characteristics shall be satisfied.
5.6	耐湿性测试 Resistance to Humidity Test	放置在温度 40±2℃，相对湿度为 90~96%环境中 96 小时后，再置于正常条件下 1 小时后测定（注意要擦去水滴）。 The switch shall be stored at a temperature of 40±2℃,relative humidity 90~96% for 96 hours,Measurements shall be made after it be subjected to the standard conditions for 1 hour(Wipe out water drip).	恒温恒湿箱 Temperature & Humidity Tester Chamber	外观，机械及电气性能均符合要求。 Appearance,electrical and mechanical characteristics shall be satisfied.
5.7	盐雾实验 Salt Mist Test	试件在下述实验后测量： 1. 温度：35±5℃ 2. 2 盐溶液浓度：5±1%（质量百分比）， 3. 实验时间：24 小时， 4. 实验后，将盐沉积物用水冲掉。 The switch shall be checked after following test: 1. Tenperature: 35±5℃ 2. Salt solution: 5±1%(Solids by mass) 3. Duration:24 hours, 4. After immersing,salt deposit shall be removed by running water.	盐雾试验机 Salt Spray Tester	在金属件上没有严重腐蚀斑点。 No remarkable corrosion shall be recognized in metal parts.

6.焊锡条件 Solder condition

6.1 焊锡条件

＊SMT 系列



*上述提到的情况是 PCB 上钢铂之温度。The above mentioned situation is the temperature of the steel platinum on the PCB.有一些情况是这 PCB 的温度和开关表面之温度会有很大的不同，这和 PCB 材质，大小，
厚度等有很大的关系。
In some cases, the temperature of the PCB and the temperature of the switch surface willbe very different, which has a great relationship with the PCB material, size, thickness andso on
因此要小心不要让表面的温度超过 260℃。
So be careful not to let the surface temperature exceed 260 ° C.
1.开关浸焊后，注意不要用溶剂清洗。
After switches were soldered,please be careful not to clean switches with solvent

2 在使用铬铁的情况下，焊锡温度应在 280 ° C 以下、3 秒以内。
In the case of using soldering iron,soldering conditions shall be280° C max and 3 sec.max

3.浸焊后，注意不要在顶部施加负荷。
Right after switches were soldered;please be careful not to load on the knobs of switches