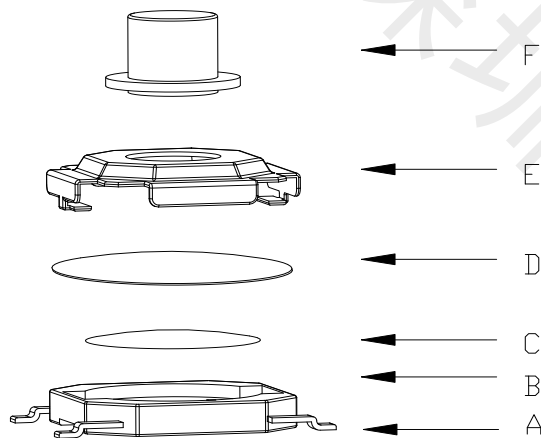
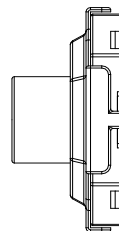
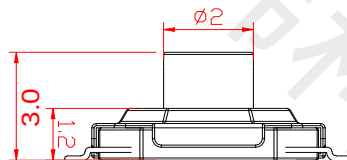
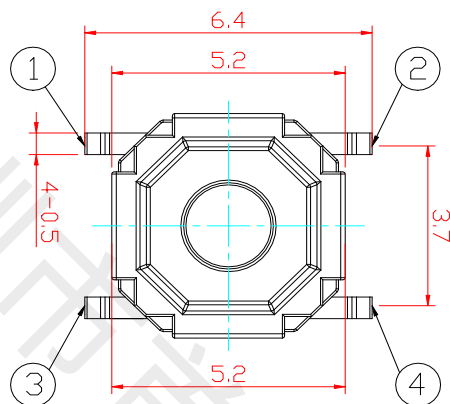


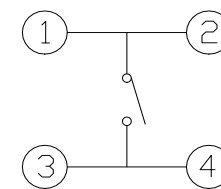


主要技术参数、性能
The Main Thchnology Performance

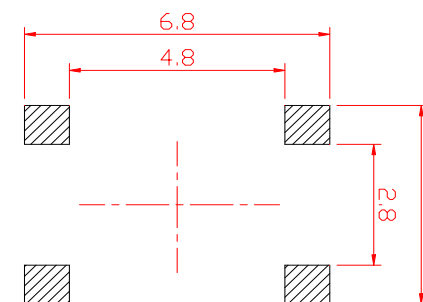
额定电流、电压 Rate voltage,current	50mA DC12V
接触电阻 Contact resistance	≤100mΩ
按力 Operating force	250±50gf
行程 travel	0.25±0.1mm
绝缘电阻 Insulated resistance	≥100MΩ
介电强度 Dielectric strength	≥250VAC/1min
寿命 Endurance	≥100000次



H	
1.5	1.7
2.0	2.5
3.0	3.5
4.0	4.3
4.5	5.0



电路图
CIRCUIT DIAGRAM



PCB. 焊接图
PCB. WELDING DRAWING

F	按钮	黄铜	1	酸洗
E	盖板	不锈钢	1	镀银
D	防尘膜	聚酰亚胺	1	橙黄色
C	弹片	不锈钢	1	镀银
B	本体	PPA	1	黑色
A	卡件	黄铜	1	镀银
项目 ITEM	名称 DESCRIPTION	材质 MATERIAL	数量 QTY	表面处理/颜色 FINISH/COLOR

					第一视角 FIRST VIEW			
标记 SING	处数 FREQUENCY	更改文件号 REVISION	签名 APPROVED	日期 DATE	比例 SCALE	1:1	一般公差 GENERAL TOLERANCE	
设计 DESIGN		李春风	2017.05.17		单位 UNIT	mm	>0.5~2	±0.10
审核 CHECKED		钟华华	2017.05.17		重量 WEIGHT		>2~5	±0.25
批准 APPROVED		罗孝金	2017.05.17				>5~10	±0.30
							角度 ANGLE	±0.5°

名称/NAME:
轻触开关
TACTILE SWITCH

型号/MODEL:
TS5230A

 深圳市首韩科技有限公司



深圳市首韩科技有限公司

SHENZHEN SHOUHAN TECHNOLOGY CO., LTD

Tel: 0755-27597601 Fax: 0755-27597491

承 认 书

SPECIFICATION FOR APPROVAL

产品编码
material code:

产品名称 Project:

轻触开关

规格型号 Part No:

TS5230A

贵公司承认印 Approval signatures

料 号/Part No.	签 章/Signatures

日期 Date:

拟制/Drawn	李春风	
审核/Check	钟华华	
批准/Approved	罗孝金	

产 品 规 格 书

PRODUCT SPECIFICATION

SIRLES		系列:TACT SWITCHES(轻触开关)	
MODEL		型号:TS5230A	
1.RATING		额定值:50mA 12VDC	
2.CONSTRUTION DIMENSION 结构尺寸		Apply to the appended drawing符合附加图纸	
3.APPEARANCE 外观		Have no remarkable damage,crack and rust etc无:明显损伤,裂纹,锈迹等.	
4.CONTACTLOOP 接触回路		Monople loop:单通单极回路	
ITEM 专案		TEST CONDITION 测试条件	SPECIFICATION 规格
5.CAPABILITY OF ELECTRIC电气性能			
5A	INSULATION RESISTANCE 绝缘电阻	Measurements shall be made following Application of DC500V potential across terminals and across terminals and fuame for 1minute在,端子之间和端子与壳之间加 DC500V 条件下,持续 1 分钟测量.	100M Ω Min 100兆欧以上
5B	WITHSTAND VILTAGE 耐电压	AC250V、50HZ、1Min (imin interrupting current $\leq$ 500uA). AC250V、50HZ、1 分钟(漏电流 500uA)	There shall be no briakdown 无击穿现象出现。
5C	CONTACT CIRCUIT 接触电阻	Addition 1.5-2 time force on the top of the keystrok and press the switch,DC50V100mA在按键顶端上等于作用力 1.5-2 倍的力按动开关,DC50V,10Ma.	100m Ω Max (100m以下) .
5D	SWITCH CONNECTION FLASH 开关接触点抖动	Addition DC5V on the two side of switch,at a speed of 3-5time a sec.to press the switch在.开关的两端加 DC5V 的电压,以 3-5 次/秒的速度按动开关.	The flash time between open not more than 10ms. 开关在接通和断开时的接点抖动时间不大于 10 ms.
6.MECHANICAL EFFICIENCY 机械性能			
6A	CONTACT STRENGTH 按键强度	The contact shall be capable of a rorce of 5N for 5 seconds in any directions沿.开关动作方向可承受静能压力 5N, 保持 5 秒钟.	Switch electric andmechanical efficiency does not break 无损开关电气或者机械性能
6B	CONTACT JOURNEY		按键行程: 0.25 $\pm$ 0.1mm
6C	DRIVE FORCE 驱动力	Being measure at across spring piece and across keystroke forergometer用.测力计在按键与弹片之间测量.	Contact switch'sd drive dirive fouce was250 $\pm$ 50gf. 按键的开关驱动力为250 $\pm$ 50gf

产 品 规 格 书 PRODUCT SPECIFICATION

-2-

6D	CONNECTION STRENGTH 接线端强度	A force of 1N being applying in any directions of the switch connection partt.在.接线端的作用方向施加 1N 的力.	Switch mechanical efficiency does not break.无损开关机械性能.
6E	MECHANICAL LIFE 机械寿命	Operatin at a rate of 30-50 cycles a minute. 以 30-50 次/分的驱动速度操作.	Life:100000cycles 寿命:100000次
7.ENVIRONME NT---RESISTANT EFFICIENCY 耐环境性能			
7A	CHANGE OF TEMPERATURE 温度变化	The first temperature shall be 65℃,2h and changed to-30℃,2h 5c ycles of above test. 先65℃, 2h,然后-30℃, 2h, 如此重复3次	1. The appearance should not break.外观应无损伤. 2. Contact resistance $\leq 100\text{ M } \Omega$ 接触电阻 $\leq 100\text{M } \Omega$ 3. Insulation resistance $\geq 100\text{M } \Omega$ 绝缘电阻 $\geq 100\text{M } \Omega$
7B	HUMIDITY RESISTANT 耐湿热	40 $\pm$ 2℃ in temperature and 95%RH ,Ruring the test time without loadp; After testing the temperature should be 48h. 经40 $\pm$ 2℃相对湿度95%,试验期间, 开关不动作,不带电负荷, 验后恢复到常温48h.	
8.IOINTING EFFICIENCY 焊接性能			
8A	SOLDERABILITY 可焊性	Temperature230 $\pm$ 5℃;Duration; 3 $\pm$ 0.5S:温度在 230 $\pm$ 5℃, 持续3 $\pm$ 0.5S	Solderability part should above 90% 可焊部分被焊料覆盖面应在 90%以上.
8B	SOLDER—RESISTANT 耐焊剂性	Warm-up temperature:100℃,40S 焊锡温度 260 $\pm$ 5℃ 浸焊时间 3 $\pm$ 0.5S	Froth height of assist solder should under board and switch electric and mechanical efficiency does not break.助焊剂发泡不应超过印制板,无损伤开关电气或机械动作性能.
8C	JOINTING—RESISTANT 耐焊接热	Jointing temperature: 250 $\pm$ 5 ℃,Duration of immersion;5 $\pm$ 1S,焊锡温度250 $\pm$ 5℃, 浸焊时间5 $\pm$ 1S,	efficiency does not break 无损伤开关电气或机械动作性能.
8D	NORMAL JOLNTING TIMES 正常焊接次数		≤ 2 times 小于 2 次
9.NOTES			
9A	The whole boxes of switch should keep in the temperature -30--80℃ and less than 80%RH withort acidic,alkalescence,caustic gas in the environment of the storage 整箱包装的开关,应在温度为-30--80℃,相对湿度不大于80%RH,周围的空气没有酸性、碱性或其他腐蚀性气体的库房内保管。		
9B	Operating Temperature Range:-25to 70℃ 操作温度的范围: -25 to 70℃		
9C	Switch should install in a correct method. 开关应按正确的安装方法进行正确安装使用。		