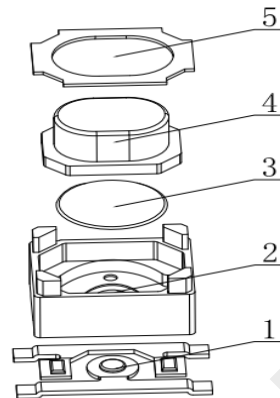
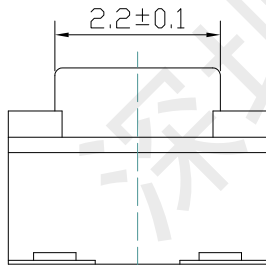
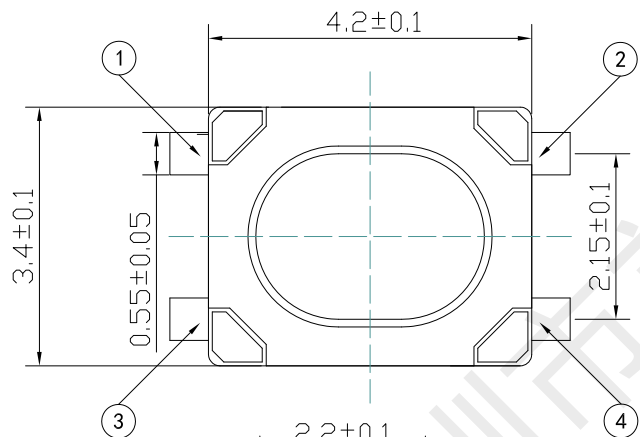
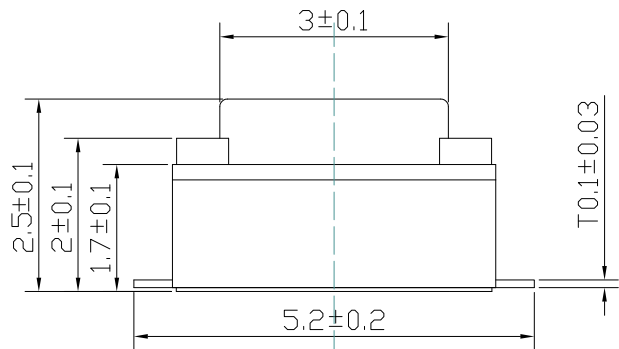
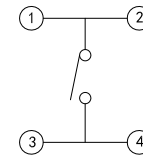
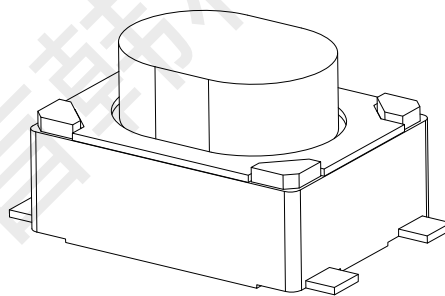


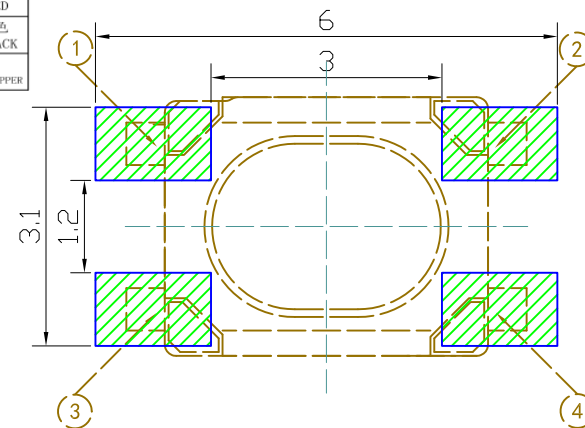
|    |     |     |
|----|-----|-----|
| H: | 2.5 | 4.0 |
|----|-----|-----|



| 序号<br>NO. | 零部件名称<br>NAME  | 材料名称<br>MATERIAL      | 数量<br>QUANTITY | 备注<br>REMARKS            |
|-----------|----------------|-----------------------|----------------|--------------------------|
| 1         | 卡件<br>TERMINAL | 磷铜<br>PHOSPHOR COPPER | 1              | 镀银<br>Ag PLATED          |
| 2         | 基座<br>CASE     | LCP                   | 1              | 白色<br>WHITE              |
| 3         | 弹片<br>CONTACT  | SUS301                | 1              | 镀银<br>Ag PLATED          |
|           | 按钮<br>STEM     | LCP/PPA               | 1              | 白色/黑色<br>WHITE/BLACK     |
| 5         | 盖板<br>COVER    | 磷铜<br>PHOSPHOR COPPER | 1              | 镀铜锡<br>TIN PLATED COPPER |



### CIRCUIT DIAGRAM



### P.C.B MOUNTING PATTERN DIMENSION

the following soldering are recommended  
for reflow soldering

|        |                     |                 |       |      |       |                 |             |       |                                                                                                   |                    |         |  |                                                                                       |
|--------|---------------------|-----------------|-------|------|-------|-----------------|-------------|-------|---------------------------------------------------------------------------------------------------|--------------------|---------|--|---------------------------------------------------------------------------------------|
| 项 目    | 规 格                 | 未标注公差列表         |       |      |       | 单 位:<br>UNIT mm |             |       | 产品系列<br>Product series                                                                            |                    | 轻 触 开 关 |  |                                                                                       |
| 额定电负荷: | DC12V 50mA          | X.              | ±0.2  | X°   | ±1°   | 材 质<br>MATERIAL |             |       | 产品名称<br>Product Title                                                                             | TS3425PA 160gf 098 |         |  |                                                                                       |
| 绝缘电阻:  | ≥100MΩ 100V DC/1min | .X              | ±0.1  | .X°  | ±0.5° | 重 量<br>WT.      |             |       | 产品编码<br>Product number                                                                            |                    |         |  |                                                                                       |
| 耐压强度:  | AC250V 50Hz/1min    | .XX             | ±0.05 | .XX° | ±0.3° | 图 号<br>DWG NO.  |             |       |                                                                                                   |                    |         |  |                                                                                       |
| 环境温度:  | -40℃ ~ +85℃         | 设计<br>DESIGN    | 李春风   |      |       | 视 图 VIEW        | 比例<br>SCALE | 1 : 1 |  深圳市首韩科技有限公司 |                    |         |  |                                                                                       |
| 接触电阻:  | ≤100mΩ Max          | 审核<br>CHECKED   | 钟华华   |      |       |                 |             |       |                                                                                                   |                    |         |  |  |
| 行 程:   | 0.18±0.1mm          | 校 准<br>STANDARD |       |      |       | 日 期 2020/03     |             |       |                                                                                                   |                    |         |  |                                                                                       |
|        |                     | 批 准<br>APPROVE  | 罗孝金   |      |       |                 |             |       |                                                                                                   |                    |         |  | 张 数 第 页                                                                               |



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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:

TS3425PA 160gf 098

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 SWITCHE(轻触开关)                                                                                                                                                         |                                                                                              |
| MODEL                         |                                    | 型号:TS3425PA 160gf 098                                                                                                                                                         |                                                                                              |
| 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<br>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<br>绝缘电阻      | Measurements shall be made following Application<br>of DC500V potential across terminals and across<br>terminals and fuame for 1minute在端子之间和端<br>子与壳之间加 DC500V 条件下,持续 1 分钟测量. | 100M $\Omega$ min<br>100 兆欧以上.                                                               |
| 5B                            | WITHSTAND VILTAGE<br>耐电压           | AC250V、50HZ、1 min (imin(interrupting<br>current $\leq 500\mu A$ ). AC250V、50HZ、1 分钟(漏<br>电流 500 $\mu A$ )                                                                     | There shall be no<br>briakdown 无击穿<br>现象出现。                                                  |
| 5C                            | CONTACT CIRCUIT<br>接触电路            | Addition 1.5-2 time force on the top of the keystrok<br>and press the switch,DC50V100mA在按键顶端上<br>等于作用力 1.5-2 倍的力按动开关,DC50V,10Ma.                                              | 100 m $\Omega$ Max<br>(100 m $\Omega$ 以下) .                                                  |
| 5D                            | SWITCH CONNECTION<br>FLASH 开关接触点抖动 | Addition DC5V on the two side of switch,at a speed<br>of 3-5time a sec.to press the switch在开关的两端<br>加 DC5V 的电压,以 3-5 次/秒的速度按动开关.                                              | The flash time<br>between open not<br>more than 10ms.<br>开关在接通和断开<br>时的接点抖动时间<br>不大于 10 ms.  |
| 6.MECHANICAL EFFICIENCY 机械性能  |                                    |                                                                                                                                                                               |                                                                                              |
| 6A                            | CONTACT STRENGTH<br>按键强度           | The contact shall be capable of a rorce of 5N for 5<br>seconds in any directions沿开关动作方向可承受<br>静能压力 5N, 保持 5 秒钟.                                                               | Switch electric<br>andmechanical<br>efficiency does<br>not break 无损开<br>关电气或者机械<br>性能        |
| 6B                            | CONTACT JOURNEY                    |                                                                                                                                                                               | 按键行程:0.18 $\pm$<br>0.1mm                                                                     |
| 6C                            | DRIVE FORCE<br>驱动力                 | Being measure at across spring piece and across<br>keystoke forergometer用测力计在按键与弹片之<br>间测量.                                                                                   | Contact switch'sd<br>drive dirive fouce<br>was160 $\pm$ 50gf.<br>按键的开关驱动力<br>为160 $\pm$ 50gf |

## 产 品 规 格 书

### PRODUCT SPECIFICATION

- 2 -

|                                             |                                                                                                                                                                                                                                      |                                                                                                                                                                                                              |                                                                                                                                            |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 6D                                          | CONNECTION STRENGTH<br>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<br>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:50000cycles<br>寿命:50000 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.<br>2. Contact resistance $\leq 100 \text{ M } \Omega$ 接触电阻 $\leq 100 \text{ M } \Omega$        |
| 7B                                          | HUMIDITY RESISTANT 耐湿热                                                                                                                                                                                                               | 40 $\pm 2^{\circ}\text{C}$ in temperature and 95%RH ,Ruring the test time without load; After testing the temperature should be 48h. 经 40 $\pm 2^{\circ}\text{C}$ ,相对湿度 95% , 试验期间,开关不动作,不带电负荷,试验后恢复到常温 48h. | 3. Insulation resistance $\geq 100 \text{ M } \Omega$ . 绝缘电阻 $\geq 100 \text{ M } \Omega$                                                  |
| 8.IOINTING EFFICIENCY 焊接性能                  |                                                                                                                                                                                                                                      |                                                                                                                                                                                                              |                                                                                                                                            |
| 8A                                          | SOLDERABILITY<br>可焊性                                                                                                                                                                                                                 | Temperature 260 $\pm 5^{\circ}\text{C}$ ;Duration; 3 $\pm 0.5\text{S}$ :温度在 260 $\pm 5^{\circ}\text{C}$ ,持续 3 $\pm 0.5\text{S}$ .                                                                            | Solderability part should above 90% 可焊部分被焊料覆盖面应在 90% 以上.                                                                                   |
| 8B                                          | SOLDER—RESISTANT<br>耐焊剂性                                                                                                                                                                                                             | Warm-up temperature:100℃,40S,焊锡温度 260 $\pm 5^{\circ}\text{C}$ ,浸焊时间 3 $\pm 0.5\text{S}$ .                                                                                                                    | 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<br>耐焊接热                                                                                                                                                                                                           | Jointing temperature: 260 $\pm 5^{\circ}\text{C}$ ,Duration of immersion: 5 $\pm 1\text{S}$ .焊锡温度 260 $\pm 5^{\circ}\text{C}$ ,浸焊时间 5 $\pm 1\text{S}$                                                        | efficiency does not break 无损伤开关电气或机械动作性能.                                                                                                  |
| 8D                                          | NORMAL JOLNTING TIMES<br>正常焊接次数                                                                                                                                                                                                      |                                                                                                                                                                                                              | $\leq 2\text{times}$ 小于 2 次                                                                                                                |
| 9.NOTES                                     |                                                                                                                                                                                                                                      |                                                                                                                                                                                                              |                                                                                                                                            |
| 9A                                          | The whole boxes of switch should keep in the temperature -30--80℃ and less than 80%RH withont acidic,alkalascence,caustic gas in the environment of the storage.<br>整箱包装的开关,应在温度为-30--80℃ ,相对湿度不大于 80% ,周围的空气中没有酸性、碱性或其他腐蚀性气体的库房内保管。 |                                                                                                                                                                                                              |                                                                                                                                            |
| 9B                                          | Operating Temperature Range:-20 to 70℃<br>操作温度的范围: -20 to 70℃                                                                                                                                                                        |                                                                                                                                                                                                              |                                                                                                                                            |
| 9C                                          | Switch should install in a correct method.<br>开关应按正确的安装方法进行正确安装使用。                                                                                                                                                                   |                                                                                                                                                                                                              |                                                                                                                                            |