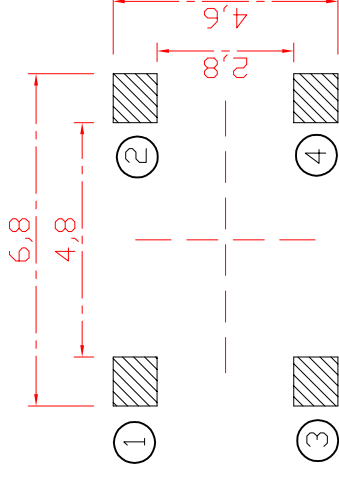
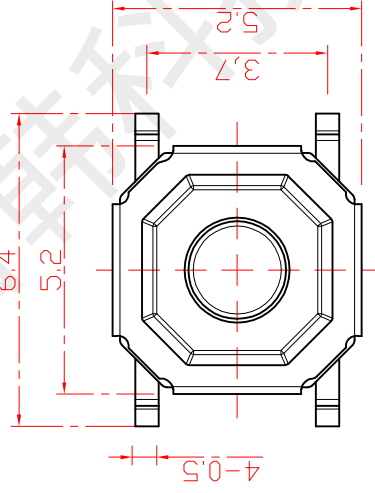
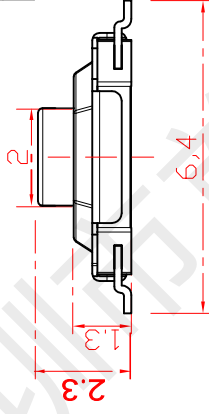
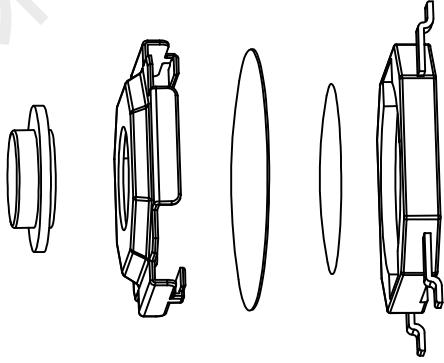


| | | |
|---|-----|-----|
| H | 1.5 | 1.6 |
| | 1.7 | 2.0 |
| | 2.5 | 3.0 |
| | 3.5 | 4.0 |
| | 4.5 | 5.0 |
| | 5.5 | |



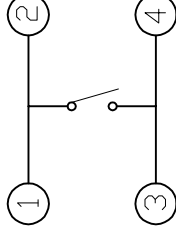
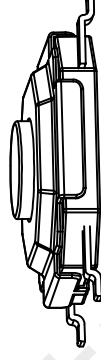
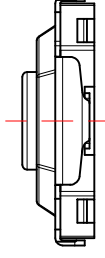
PCB. 焊接图

主要技术规格:

1. 额定值: 50mA DC12V
2. 接触电阻: $\leq 100m\Omega$
3. 操作力: 160 \pm 50gf
4. 行程: 0.25 \pm 0.10mm
5. 绝缘电阻: $\geq 100M\Omega$
6. 抗电强度: 100V 50HZ 1Min.
7. 寿命: 100,000 Cycles

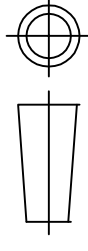
材料:

- 本体: LCP (灰色)
- 按钮: 黄铜 (酸洗)
- 卡件: 磷铜 (镀银)
- 弹片: 不锈钢 (镀银)
- 盖板: 不锈钢
- 防水层: 聚酰亚胺



电路图

| | | | | | | | |
|----|----|-------------------------------|------------|------------|-----|---------------------|-----------------|
| | | 深圳市首韩科技有限公司 SHOUHAN | | 品名: | | 轻触开关 | |
| | | | | 型号: | | SH-TS-1187-23-160gf | |
| 标记 | 处数 | 更改文件号 | 签名 | 日期 | 比例 | 一般公差 | |
| 设计 | | 李春风 | 2021.08.25 | 2021.08.28 | 1:1 | >0.5~2 | ± 0.10 |
| 审核 | | 钟德华 | 2021.08.28 | | | >2~5 | ± 0.25 |
| 批准 | | 罗孝金 | 2021.08.30 | | | >5~10 | ± 0.30 |
| | | | | | | 角度 | $\pm 0.5^\circ$ |
| | | | | | | 第一视角 | |





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: SH-TS-1187-23-160gf

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:FLIP SWITCHES(轻触开关) | |
| MODEL | | 型号:SH-TS-1187-23-160gf | |
| 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、1 min (i min(i nterrupting 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 接触电路 | 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. | 100 m Ω Max (100 m Ω 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 betwecn 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 keystoke forergometer用测力计在按键与弹片之间测量. | Contact switch'sd drive dirive fouce was160 \pm 50gf. 按键的开关驱动力为160 \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°C ,2h and changed to-30°C, 2h, 5c ycles of above test. 先 65°C, 2h, 然后-30°C, 2h, 如此重复 3 次. | 1. The appearance should not break. 外观应无损伤. 2. Contact resistance $\leq 100 M \Omega$ 接触电阻 $\leq 100M \Omega$ |
| 7B | HUMIDITY RESISTANT 耐湿热 | 40 \pm 2°C in temperature and 95%RH , Ruring the test time without load; After testing the temperature should be 48h. 经 40 \pm 2°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 $\geq 100 M \Omega$. 绝缘电阻 $\geq 100 M \Omega$ |
| 8.IOINTING EFFICIENCY 焊接性能 | | | |
| 8A | SOLDERABILITY 可焊性 | Temperature 250 \pm 5°C ; Durati on; 3 \pm 0.5S: 温度在 250 \pm 5°C, 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°C, 40S, 焊锡温度 250 \pm 5°C, 浸焊时间 3 \pm 0.5S. | Proth height of assist solder should under board and switch electric and mechanical efficien- cy 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°C , Duration of immersion: 5 \pm 1S. 焊锡温度 250 \pm 5°C, 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°C 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°C, 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:-25to 70C 操作温度的范围: -25 to 70°C | | |
| 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。 | | |