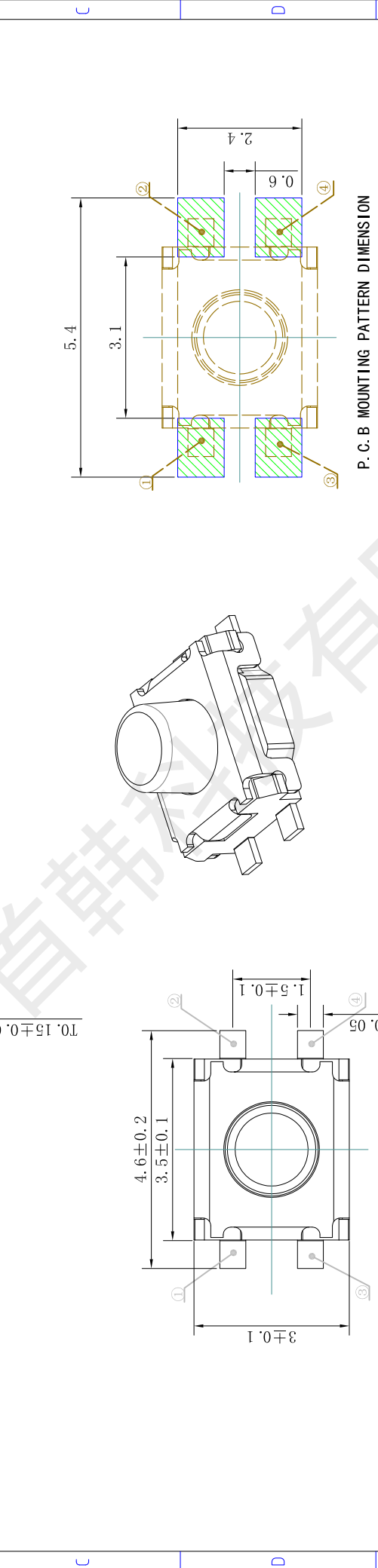
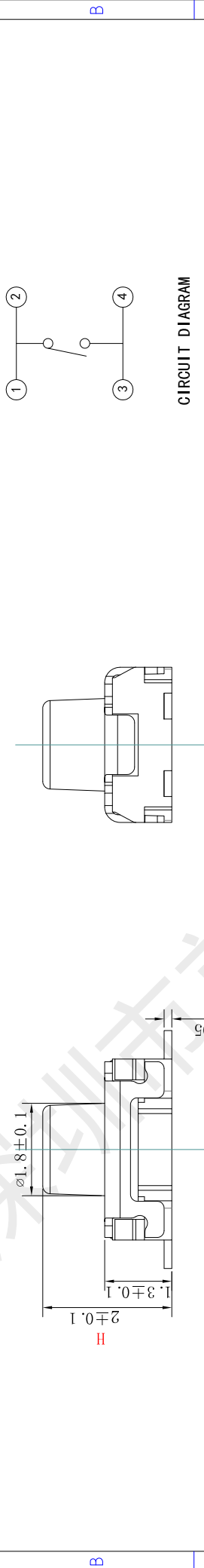


| | | | | | | | |
|--------|-----|------|-----|-----|----------------------------------|------------|----------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| H: 1.7 | 1.8 | 1.87 | 2.0 | 2.5 | ECN编号/变更内容 ECN NO./DEFINITION | 日期 DATE | 修改 REVISE |
| | | | | | 标 记 MARK. | | 核 准 APPROVE |

CYCLES OF ACTIONS
动作次数:
50,000次
100,000次
300,000次



| 序号 NO. | 零部件名称 NAME | 材料名称 MATERIAL | 数量 QUANTITY | 备注 REMARKS |
|--------|----------------|--------------------|-------------|------------------|
| 1 | 卡件 TERMINAL | 磷铜 PHOSPHOR COPPER | 1 | 镀银 Ag PLATED |
| 2 | 基座 CASE | LCP | 1 | 白/黑色 WHITE/BLACK |
| 3 | 弹片 CONTACT | SUS301 | 1/2 | 镀银 Ag PLATED |
| 4 | 防尘膜 SEAL PLATE | 聚酰亚胺 PI | 1 | 黄色 YELLOW |
| 5 | 按钮 STEM | LCP | 1 | 白/黑色 WHITE/BLACK |
| 6 | 盖板 COVER | SUS304 | 1 | 清洗 CLEANOUT |

| 项目 | 规格 |
|--------|--|
| 额定电负荷: | DC12V 50mA |
| 绝缘电阻: | $\geq 100M\Omega$ 100V DC/1min |
| 耐压强度: | AC250V 50Hz/1min |
| 环境温度: | $-25^{\circ}\text{C} \sim +70^{\circ}\text{C}$ |
| 接触电阻: | $\leq 100m\Omega$ Max |
| 行程: | $0.18 \pm 0.1\text{mm}$ |

| 未标注公差列表 | 设计 DESIGN | 审核 CHECKED | 批准 APPROVE |
|-------------------------|-----------|------------|------------|
| X. ± 0.2 | 李春风 | 钟德华 | 罗孝金 |
| .X. ± 0.1 | | | |
| .XX. ± 0.05 | | | |
| .XXX. ± 0.02 | | | |
| .XXX. $\pm 0.3^{\circ}$ | | | |
| .XXX. $\pm 0.5^{\circ}$ | | | |
| .XXX. $\pm 1^{\circ}$ | | | |

| 单位: UNIT | mm |
|-------------|--------------|
| 材料 MATERIAL | |
| 重量 WT. | |
| 图号 DWG NO. | |
| 视图 VIEW | 比例 SCALE 1:1 |
| 版本 REV. | A0 |
| 日期 DATE | 2020/03 |

| 产品系列 Product series | 轻触开关 |
|---------------------|---------------------|
| 产品名称 Product Title | 3*4 圆钮 无柱直脚 四脚小电 |
| 产品编码 Product number | SH-TS-1185-4P-250gf |

| 深圳市首韩科技有限公司 SHOHAN | 张数 8 | 页 8 |
|--------------------|------|-----|
|--------------------|------|-----|



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

商品编码 Part Code:

产品名称 Project:

轻触开关


规格型号 Part No:

SH-TS-1185-4P-250gf

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:SH-TS-1185-4P-250gf | |
| 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 (imin(interrupting current) $\leq 500\mu A$). AC250V、50HZ、1 分钟(漏电流 500 μA) | 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 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 betwen 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: 0.18 \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:50000cycles 寿命:500000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 thetest 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 $\geq 100M \Omega$ |
| 8.IOINTING EFFICIENCY 焊接性能 | | | |
| 8A | SOLDERABILITY 可焊性 | Temperature245 \pm 5°C ;Duration;3 \pm 0.5S:温度在 245 \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 260 \pm 5°C, 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°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 withourt 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 70°C 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。 | | |