



深圳市首韩科技有限公司

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承 认 书

SPECIFICATION FOR APPROVAL

客 户 Customer:

产品名称 Project:

轻触开关


规格型号 Part No:

TS6645B 3 J

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 | 张栋 | |
| 批准/Approved | 罗孝金 | |



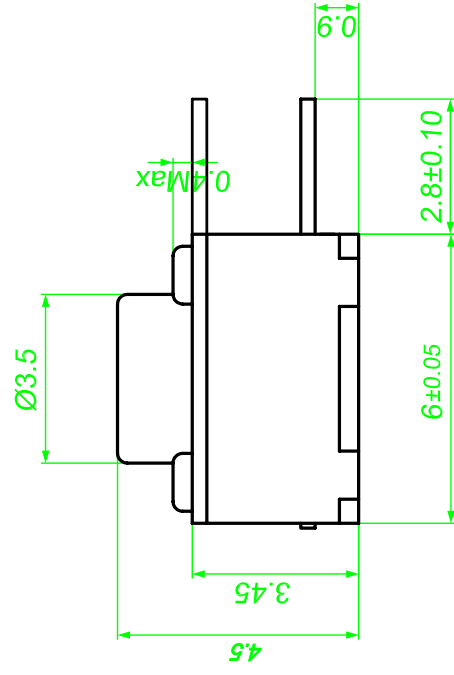
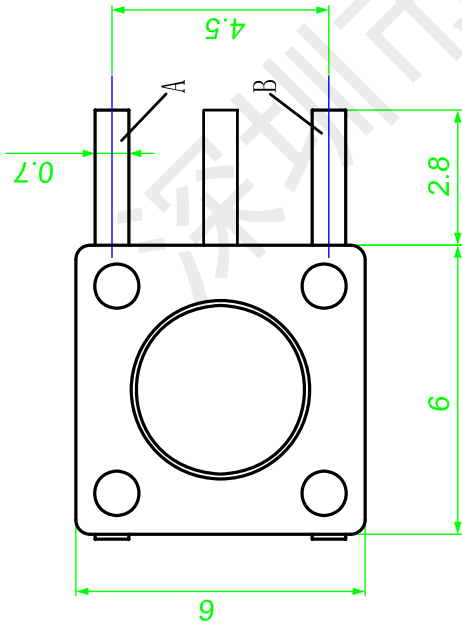
产品规格书

PRODUCT SPECIFICATION

| | | | |
|-------------------------------|------------------------------------|--|---|
| SIRLES | | 系列:FLIP SWITCHES(轻触开关) | |
| MODEL | | 型号: TS6645B3J | |
| 1.RATING | | 额定值: DC12V 50mA | |
| 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 DC100V potential across terminals and across terminals and fuame for 1minute,在端子之间和端子与壳之间加 DC100V 条件下,持续 1 分钟测量. | 100M Ω min 100 M Ω 以上. |
| 5B | WITHSTAND VILTAGE 耐电压 | AC250V、50HZ、1 min (imin(interrupting current ≤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. | 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 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 | 开关 的动作方向为垂直放置开关,并以双倍动作力的静 负荷作用推柄中心,测量推柄从开始到停止的行程 距离 | 0.25± 0.1mm |
| 6C | DRIVE FORCE 驱动力 | Being measure at across spring piece and across keystone forergometer. 用测力计在按键与弹片之 间测量. | 按键开关驱动力为 250± 50gf |



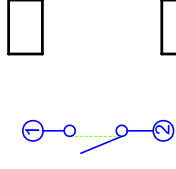
| | | | |
|---|---|---|--|
| 6D | CONNECTION STRENGTH 接线端强度 | A force of 1N being applying in any directions of the switch connection partt..在接线端的作用方向施加 1N 的力. | Switch mechanical efficiency does not break.无损开关机械性能. |
| 6E | MECHANICAL LIFE 机械寿命 | Operatin at a rate of 30-50 cycles a minute. 以 30-50 次/分的驱动速度操作. | Life:50000cycles 寿命: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 70 °C ,3h and changed to-25°C, 0.5h, 5cycles of above test. 先 70°C, 3h, 然后-25°C, 0.5h, 如此重复 5 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 90-95%RH, Ruring thetest time without load; After testing the temperature should be 24h. 经 40 \pm 2°C, 相对湿度 90-95%, 试验期间, 开关不动作, 不带电负荷, 试验后恢复到常温 24h. | 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 | Temperature260 \pm 5 °C ;Duration;3 \pm 0.5S:温度在 260 \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 5 \pm 0.5S. | Froth 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: 260 \pm 5 °C ,Duration of immersion: 5 \pm 1S. 焊锡温度 260 \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:-25 to 75°C 操作温度的范围: -25 to 75°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。 | | |



技术要求

- 1、ELECTRICAL CHARACTERISTICS (电气性能):
 - 1.1 Rating (额定值): DC12V 50mA
 - 1.2 Travel (行程): 0.25±0.1mm
 - 1.3 Contact Resistance (接触电阻): 100mΩ Max
 - 1.4 Life (寿命): 50,000 Cycles MIN (大于50,000次)
- 2、ELECTRICAL temperature rang (使用温度范围): -25°C ~ +70°C

SCHEMATIC



Recommended P. C. B Layout



| 序号 | 零件名称 | 材质 |
|----|------|-------|
| 1 | 底座 | PA塑料 |
| 2 | 盖板 | 铁 |
| 3 | 按钮 | PA塑料 |
| 4 | 弹片 | 磷铜/复银 |
| 5 | 卡件 | 铜 |

| 单位 | mm | 一般公差 | 名称 |
|---------|-----|---------------|-----------|
| 制图 | 李春风 | L≤4 ±0.2 | 轻触开关 |
| 设计 | | 63<L≤250 ±0.5 | |
| 审核 | 钟华华 | 250<L ±0.7 | |
| CHECKED | | 4<L≤16 ±0.3 | |
| 标准化 | | 16<L≤63 ±0.4 | |
| 批准 | 罗孝金 | 材料 | Model No. |
| APPROVE | | 重量 | TS6645B3J |
| | | 表面积 | 料号 |
| | | SA | Part No. |
| | | | 视图 |
| | | | 比例 |
| | | | SCALE |
| | | | 版本 |
| | | | REV. |
| | | | 张数 |
| | | | SHEET |
| | | | 第2页, 共6页 |
| | | | C 图 |
| | | | C DWG |

青梯 SHENZHEN 深圳市首韩科技有限公司

标记 MARK. ECN 编号/变更内容 ECN NO./DEFINITION

修改 REVISION 日期 DATE

批准 APPROVE

标准 STANDARD

材料 MATERIAL

表面积 SA

重量 WT.

视图 PROJ.