

# Product Specifications

## 产 品 承 认 书

客 户 Customer: \_\_\_\_\_

部品编号 Part Number: \_\_\_\_\_

产品名称 Description: 12x12x \_\_\_\_\_

客户料号 Code NO: \_\_\_\_\_

| 样品提供 (SAMPLE PROVIDE) |          |             |
|-----------------------|----------|-------------|
| 工程 Engineering        | 业务 Sales | 核准 Approval |
|                       |          |             |

| 客户承认 (CUSTOMER APPROVAL) |        |             |
|--------------------------|--------|-------------|
| 工程 Engineering           | 品管 Q.C | 核准 Approval |
|                          |        |             |

# 产 品 承 认 书 目 录

|             |     |
|-------------|-----|
| 1、封面-----   | 1-1 |
| 2、目录-----   | 2-2 |
| 3、技术规范----- | 3-7 |
| 4、产品图纸----- | 8-8 |

1、SCOPE: (适用范围)

1.1 This practice applies to the content 12x12x7 Tie Pian touch the s witch of production and inspection and testing..

本规范内容适用于本公司 12X12X7 正按贴片轻触开关的生产与检验测试

2、USE CONDITION: (使用条件)

2.1 Ambient temperature Range:-20℃～+70℃

环境温度: -20℃～+70℃

2.2 Type of actuatlon: Tactile feedback

动作类型: 轻触返回

2.3 Contact arrangement 1 poles1 throws

接触形式 1 接点 1 回路

3、Appearance and Dimension: (外观及尺寸)

3.1 Appearance:Product surface without defect、dirt、crack、and mechanical damang, Contact without rust,plating not oxidized and not peeled.

产品表面不应有对制品有害的缺陷、污垢、裂痕及机械损伤; 接触件无锈蚀、镀层氧化、脱落等现象.

3.2 Dimension:According to drawings

外形尺寸: 依照附图

3.3 Exchangable:Exchangable with same specification products.

互换性: 相同规格应能互换

5、Material:

材 料

| P/N<br>零件名称      | Material<br>材 料               | Finish<br>表面处理                        | Expiain<br>说 明     |
|------------------|-------------------------------|---------------------------------------|--------------------|
| Shrapnel<br>弹片   | Stainless steel<br>铜 厚 0.07mm |                                       | RoHS<br>Comp liant |
| Terminal<br>接触脚  | Brass<br>黄铜 厚 0.30 mm         | Silver Plating:3~4 μ m<br>镀银: 3~4 μ m |                    |
| Lap<br>盖板        | Brass<br>铁 厚 0.25 mm          | Tin Plating:3~4 μ m<br>镀铜锡3~4 μ m     |                    |
| Button<br>按钮     | PPA                           | 颜色: 黑色                                |                    |
| Foundation<br>底基 | PPA                           | 颜色: 黑色                                |                    |

6、Electrical Performance:

电 气 性 能

| N0.<br>序号 | Ltem<br>项 目                   | Requirement<br>技术要求   |
|-----------|-------------------------------|-----------------------|
| 6.1       | Voltage Rated<br>额定电压         | 12V AC DC             |
| 6.2       | Current Rated<br>额定电流         | 0.05A AC DC           |
| 6.3       | Contact Resistance<br>接触电阻    | $\leq 0.1 \Omega$     |
| 6.4       | Insulation Resistance<br>绝缘电阻 | $\geq 100 M\Omega$    |
| 6.5       | Dielectric Strength<br>耐 压    | $\geq 250V$ AC/minute |
| 6.6       | Bounce<br>抖动                  | 5m sec max            |

7、Mechanical Performance:

机 械 性 能

| N0.<br>序号 | Ltem<br>项 目            | Requirement<br>技术要求                                                                                                                                                               |
|-----------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7.1       | Action force<br>动作力    | $260 \pm 50gf$                                                                                                                                                                    |
| 7.2       | To force<br>返回力        | $70 \pm 30gf$ min                                                                                                                                                                 |
| 7.3       | Still strength<br>静止强度 | Push the handle in the direction of movement imposed 3kg static load acts, 60 seconds is not mechanical and electrical damage phenomenon<br>在推柄动作方向施加 3KG 的静负荷力，60 秒时间无机械和电气的损伤现象 |
| 7.4       | Stem Strength<br>推柄强度  | $\geq 3kgf$                                                                                                                                                                       |
| 7.5       | Travel<br>行程           | $0.22 \pm 0.1mm$                                                                                                                                                                  |
| 7.6       | Life<br>使用寿命           | $\geq 100000$ 次                                                                                                                                                                   |

## 8、Endurance Characteristics:

### 环境性能

| N0.<br>序号 | Ltem<br>项 目                          | Requirement<br>技术要求                                                                                                                                                                                                                                                                                                                                 |
|-----------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8.1       | Soldering rest<br>可焊性                | Time: $2.5 \pm 0.5S$<br>时间: $2.5 \pm 0.5S$<br>Temperature: $260 \pm 5^{\circ}C$<br>温度: $260 \pm 5^{\circ}C$<br>Area of Soldering: $\geq 95\%$<br>焊锡面积: $\geq 95\%$                                                                                                                                                                                  |
| 8.2       | Resistance to soldering Heat<br>耐焊接热 | Time: $2.5 \pm 1S$<br>时间: $2.5 \pm 1S$<br>Temperature: $260 \pm 5^{\circ}C$<br>温度: $260 \pm 5^{\circ}C$<br>Appearance: NO Damage<br>外观: 无损坏                                                                                                                                                                                                         |
| 8.3       | Heat test<br>耐热性                     | Time: 96h<br>时间: 96 小时<br>Temperature: $+85 \pm 3^{\circ}C$<br>温度: $+85 \pm 3^{\circ}C$<br>Appearance: NO Damage<br>外观: 无损坏<br>Contact resistance: $\leq 0.1 \Omega$<br>接触电阻: $\leq 0.1 \Omega$                                                                                                                                                     |
| 8.4       | Cold test<br>耐冷性                     | Time: 48h<br>时间: 48 小时<br>Temperature: $-25 \pm 3^{\circ}C$<br>温度: $-25 \pm 3^{\circ}C$<br>Appearance: NO Damage<br>外观: 无损坏<br>Contact resistance: $\leq 0.1 \Omega$<br>接触电阻: $\leq 0.1 \Omega$                                                                                                                                                     |
| 8.5       | Temperature Cycling<br>温度循环          | Low temperature: $-25 \pm 3^{\circ}C$<br>低温: $-25 \pm 3^{\circ}C$<br>High temperature: $-85 \pm 3^{\circ}C$<br>高温: $-85 \pm 3^{\circ}C$<br>For 5 cycles. test after keeping in Normal Condition for 30 min.<br>5 次循环后, 放置在正常环境中 30 分钟, 进行测试<br>Appearance: NO Damage<br>外观: 无损坏<br>Contact resistance: $\leq 0.1 \Omega$<br>接触电阻: $\leq 0.1 \Omega$ |

|     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8.6 | Invariab lenes humidity<br>恒定湿热 | <p>Temperature: <math>60 \pm 2^{\circ}\text{C}</math><br/>温度: <math>60 \pm 2^{\circ}\text{C}</math></p> <p>Relative humidity: 90%–96% RH<br/>相对湿度: 90%–96% RH</p> <p>Tim: 96h<br/>时间: 96 小时</p> <p>Appearance: NO Damage<br/>外观: 无损坏</p> <p>Contact resistance: <math>\leq 0.1 \Omega</math><br/>接触电阻: <math>\leq 0.1 \Omega</math></p> <p>Insulation Resistance: <math>\geq 100 \text{M} \Omega</math><br/>绝缘电阻: <math>\geq 100 \text{M} \Omega</math></p>                                                                                                                                                      |
| 8.7 | Salt Spray<br>盐雾试验              | <p>Salt concentration: <math>5 \pm 1\%</math><br/>浓度: <math>5 \pm 1\%</math></p> <p>Temperature: <math>35 \pm 2^{\circ}\text{C}</math><br/>温度: <math>35 \pm 2^{\circ}\text{C}</math></p> <p>Tim: <math>12 \pm 1 \text{h}</math><br/>时间: <math>12 \pm 1</math> 小时</p> <p>After salt is removed by running wafer and A drop is removed ,it is measured.<br/>把试验样品从试验箱顶悬挂下来,采用浓度 (<math>5 \pm 1</math>) %的氯化钠溶液,连续雾化 16 小时,试验后用流动的蒸馏水轻轻洗去表面沉积物,在常温常驻湿条件下恢复 1-2 小时,外观无损伤</p> <p>Appearance: NO Damage<br/>外观: 无损坏</p> <p>Contact resistance: <math>\leq 0.1 \Omega</math><br/>接触电阻: <math>\leq 0.1 \Omega</math></p> |

## 9、Packaging Transportation Storage

包装、运输、贮存

### 9.1 Packaging

包装

**Products for the inner packing box, packing ( ) got stuck in, and of the product name, specifications and model number of the date of production and other information**

产品内包装为小纸盒包装，装（贴）入合格证，注明产品名称、规格型号、数量生产日期等信息

- (1) **Exterior package is carton, facing the packing list, the packing list marked with product name, specification model, quantity, date of dispatch.**

外包装为纸箱，贴装箱单、装箱单上注明产品名称、规格型号、数量、出货日期

- (2) **The product in the box must not rock.**

产品在箱内不晃动

### 9.2 Transportation

运输

**Allow for any way transportation, can't get wet and mechanical in jury.**

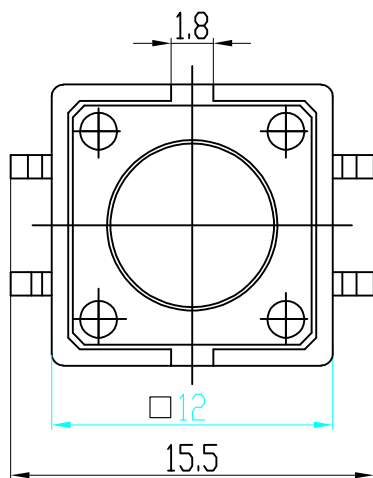
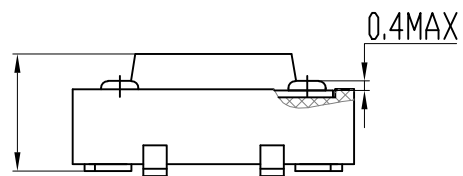
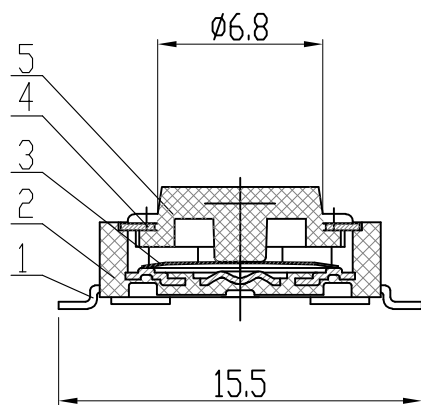
允许用任何方式运输，勿淋湿及机械性损伤

### 9.3 Storage

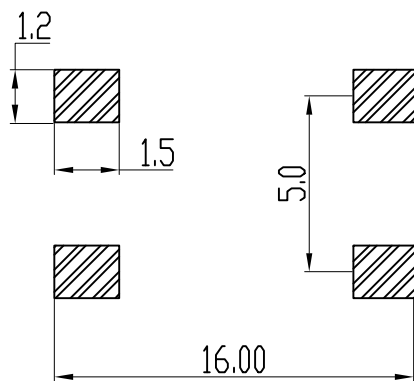
贮存

**The connector of packing finished should be in the ambient temperature between-10℃ to+40℃, Relative humidity≤80%. To store in storehouse does not have acidic, alkaline air and other corrosive gas in the ambient air.**

包装完毕的轻触开关应在环境温度为-10℃~+40℃，相对湿度≤80%，周围空气中没有酸性，碱性及其它腐蚀性气体的库房中贮存



印制线路板  
P.C.B layout



| 5  | 手柄   |       | PPA  |      |      |     |      |      |          | 黑   |
|----|------|-------|------|------|------|-----|------|------|----------|-----|
| 4  | 支架   |       | 铁皮   |      |      |     |      |      |          | 镀铜锡 |
| 3  | 簧片   |       | 铜    |      |      |     |      |      |          | 覆银  |
| 2  | 底座   |       | PPA  |      |      |     |      |      |          | 黑   |
| 1  | 接线片  |       | 黄铜   |      |      |     |      |      |          | 镀银  |
| 序号 | 部件名称 | 图号    | 材料名称 | 牌号规格 | 强化剂  | 阻燃性 | 连续耐温 | 供应厂商 | 环境物质控制指标 | 备注  |
|    |      |       |      |      |      |     |      |      |          |     |
|    |      |       |      |      |      |     |      |      |          |     |
|    |      |       |      |      |      |     |      |      |          |     |
| 标记 | 处数   | 更改文件号 | 签字   | 日期   | 总 图  |     |      |      | 12*12*   |     |
| 设计 |      |       |      |      |      |     |      |      |          |     |
| 绘图 |      |       | 会    |      | 图样标记 |     | 重量   | 比例   |          |     |
| 批准 |      |       | 审    |      |      |     |      |      |          |     |
| 日期 |      |       |      |      | 共 页  |     | 第 页  |      |          |     |