

# 产品承认书

## SPECIFICATION FOR APPROVAL

|                                             |                                                     |
|---------------------------------------------|-----------------------------------------------------|
| 客户名称<br>Customer: _____                     | 客户代码<br>Customer Code: _____                        |
| 客户料号<br>Customer NO.: _____                 | 本公司料号<br>Model NO.: <u>TSX12311-065D531DH-R0500</u> |
| 规格名称<br>Description: <u>12*12*6.5防水轻触开关</u> | 日 期<br>Date: <u>2025.05.23</u>                      |

|                                                      |                   |                                                               |                   |                                                            |                   |
|------------------------------------------------------|-------------------|---------------------------------------------------------------|-------------------|------------------------------------------------------------|-------------------|
| <input type="checkbox"/> 新品承认<br>New Product Approve |                   | <input type="checkbox"/> 规格变更承认<br>Description Change Approve |                   | <input type="checkbox"/> 材料变更承认<br>Material Change Approve |                   |
| 设 计<br>Designed                                      | 余嘉诚<br>2025.05.23 | 审 核<br>Checked                                                | 朱树清<br>2025.05.23 | 批 准<br>Approved                                            | 徐君辉<br>2025.05.23 |

### 客户确认栏 Customer approval

|                       |                 |                          |                 |
|-----------------------|-----------------|--------------------------|-----------------|
| 采 购<br>Purchase Dept. | 品 质<br>QC Dept. | 工 程<br>Engineering Dept. | 批 准<br>Approved |
|                       |                 |                          |                 |

|                   |                                           |                                                    |                                             |
|-------------------|-------------------------------------------|----------------------------------------------------|---------------------------------------------|
| 结 论<br>Conclusion | <input type="checkbox"/> 合 格<br>Qualified | <input type="checkbox"/> 重新送样<br>Sample Test Again | <input type="checkbox"/> 不合格<br>Unqualified |
|-------------------|-------------------------------------------|----------------------------------------------------|---------------------------------------------|

地址: 浙江省乐清市宋湖工业区汇丰路 92 号 邮编: 325600  
Add: NO.92 Huifeng Road, Songhu Ind. Zone, Yueqing  
325600, Zhejiang, China  
Tel: 0577-62533000 61522500 62532000  
Fax: 0577-62078255 62530255  
QQ: 292229076 1022393300 200858758



ISO9001    ISO14001    ISO45001

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|  | 产品承认书         | 产品名称<br>Product name | 轻触开关<br>Tact Switch | 版本<br>Edition | A   |
|                                                                                  | SPECIFICATION | 型 号<br>Model         | TSX12311-065        | 页码<br>Page    | 1/8 |

- 1、 概述
- General
- 1.1 适用范围
- Application
- 此承认书适用与机械式轻触开关的相关要求
- This specification is applied to the requirements for Tact Switch（Mechanical Contact）
- 1.2 工作温度范围
- Operating Temperature Range
- 40℃～85℃（在标准大气压、标准湿度条件下）
- 40℃～85℃（Normal humidity,normal air pressure）
- 1.3 贮存环境
- Storage environment
- 开关应贮存在温度为-5～30℃、相对湿度不大于 65%, 周围空气中无酸、碱、硫或其它腐蚀性气体的库房中。
- The switch should be stored in warehouse which temperature of -5～30℃, relative humidity of not more than 65%, no acid, alkali, sulfur and other corrosive gases in the ambient air
- 1.4 测试条件
- Test Conditions
- 在没有其他特定的条件下，应该在以下的条件进行测试和测量：
- Unless otherwise specified, tests and measurements shall be made in the following standard conditions:
- 常温.....5℃～35℃
- Normal Temperature.....5℃～35℃
- 相对湿度.....65%±5%
- Normal Humidity .....65%±5%
- 标准大气压.....86KPa～106KPa
- Normal air pressure .....86KPa～106KPa
- 在制造过程中，测试和测量应该在以下的条件下进行：
- If any doubt arise from the judgment, test shall be conducted at the following conditions:
- 温度.....20℃±2℃
- Temperature .....20℃±2℃
- 相对湿度.....65%±5%
- Relative humidity .....65%±5%
- 环境气压.....86KPa～106KPa
- Air pressure .....86KPa～106KPa

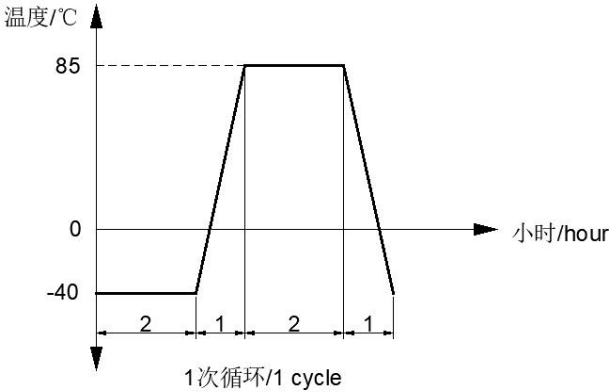
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- 2、 详细说明
- Detailed specification
- 2.1 外观：应无影响、降低产品性能的缺陷；
- Appearance: There should be no defects that affect the serviceability of product.
- 2.2 结构尺寸和安装尺寸：应符合装配图要求；
- Structure and dimension: shall conform to the assemble drawings.
- 2.3 操作形式：有触觉反应的操作
- Type of actuating: Tactile feedback.
- 2.4 开关结构：单回路单输出（具体的触点结构在装配图中已绘出）
- Contact arrangement: 1 pole, 1 throw
- (Details of contact arrangement are given in the assembly drawings)
- 2.5 开关工作额定值：DC 12V，50mA（有效值）
- Ratings: 12V DC, 50mA (effective value)
- 3、 电气性能：
- Electrical Specification

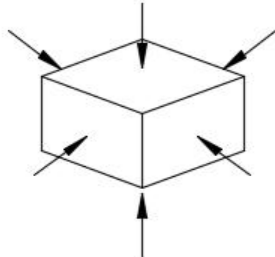
| 项 目<br>Item |                                  | 试验条件<br>Test Conditions                                                                                                                                                                                                                         | 要求<br>Requirements                                    |
|-------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| 3.1         | 接触电阻<br>Contact Resistance       | 在以 5V 10mA 的直流电源或不低于 1KHz 的交流电源的电路中，以一个等于 2 倍按力的静负荷施加于手柄中心<br>Applying a static load of 2 times operating force to the center of the stem, measurement shall be made by 5V DC 10mA or more than 1KHz AC small-current contact resistance meter. | ≤100mΩ                                                |
| 3.2         | 绝缘电阻<br>Insulation Resistance    | 在端子之间施加 DC 100V/1min 的条件下，测量端子之间底座、盖板的电阻值<br>Measurement shall be made following application of 100V DC potential, across terminals, and across terminals and cover, for one minute.                                                            | ≥100MΩ                                                |
| 3.3         | 介质耐压<br>Dielectric voltage proof | 在端子之间施加 250V AC（50Hz 或 60Hz）/1min<br>250V AC (50Hz or 60Hz) shall be applied across terminals, for one minute.                                                                                                                                  | 无击穿、无飞弧<br>There should be no breakdown and flashover |

|                                                                                  |                        |                                                                                                                                                                                                                                                                                             |                     |                                                                                               |     |
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|  | 产品承认书<br>SPECIFICATION | 产品名称<br>Product name                                                                                                                                                                                                                                                                        | 轻触开关<br>Tact Switch | 版本<br>Edition                                                                                 | A   |
|                                                                                  |                        | 型 号<br>Model                                                                                                                                                                                                                                                                                | TSX12311-065        | 页码<br>Page                                                                                    | 3/8 |
| 项 目<br>Item                                                                      |                        | 试验条件<br>Test Conditions                                                                                                                                                                                                                                                                     |                     | 要求<br>Requirements                                                                            |     |
| 4.机械性能：<br>Mechanical Specification                                              |                        |                                                                                                                                                                                                                                                                                             |                     |                                                                                               |     |
| 4.1                                                                              | 按力<br>Operating Force  | 开关垂直于操作方向放置，在开关驱动件顶端中心逐渐施力，测量开关导通所需的最大力度。<br>Placing the switch such that the direction of switch operation is vertical and then gradually the load applied to the center of the stem, the maximum load required of the switch to come to a stop shall be measured.                         |                     | 330gf±50gf<br>详见附页 1<br>开关（荷重-行程）曲线<br>See Appendix 1<br>Switch (load - travel) test chart    |     |
| 4.2                                                                              | 最大行程<br>Full Travel    | 开关垂直于操作方向放置，以一个等于 2 倍按力的静负荷施加在开关驱动件顶端中心，测量顶端移动的距离。<br>Placing the switch such that the direction of switch operation is vertical and then applying static load of 2 times operating force to the center of the stem:the travel distance for the switch to come to a stop shall be measured. |                     | 0.35±0.1mm<br>详见附页 1<br>开关（荷重-行程）曲线测试图<br>See Appendix 1<br>Switch (load - travel) test chart |     |
| 4.3                                                                              | 回弹力<br>Return Force    | 开关垂直于操作方向放置，在开关驱动件顶端中心下降至全行程后，测量顶端向自由位置转换的力度。<br>The sample switch is installed such that the direction of switch operation is vertical and upon depressing the stem in its center to the whole travel distance, the force of the stem to return to its free position shall be measured.    |                     | ≥40gf<br>详见附页 1<br>开关（荷重-行程）曲线测试图<br>See Appendix 1<br>Switch (load - travel) test chart      |     |
| 4.4                                                                              | 静止强度<br>Stop Strength  | 开关垂直于操作方向放置，从操作方向向驱动件施加 30N 的静负荷持续 60 秒。<br>Placing the switch such that the direction of switch operation is vertical, and then a static load of 30N shall be applied in the direction of stem operation for a period of 60 s.                                                             |                     | 无机械和电气损坏<br>There shall be no sign of damage mechanically and electrically                    |     |

|                                                                                  |        |                                                                                                                                                                                                                                                                      |  |              |              |                                                                                                                                                         |     |
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|  |        | 产品承认书                                                                                                                                                                                                                                                                |  | 产品名称         | 轻触开关         | 版本                                                                                                                                                      | A   |
|                                                                                  |        | SPECIFICATION                                                                                                                                                                                                                                                        |  | 型 号          | TSX12311-065 | 页码                                                                                                                                                      | 4/8 |
|                                                                                  |        |                                                                                                                                                                                                                                                                      |  | Product name | Tact Switch  | Edition                                                                                                                                                 |     |
|                                                                                  |        |                                                                                                                                                                                                                                                                      |  | Model        |              | Page                                                                                                                                                    |     |
| 项 目                                                                              |        | 试验条件                                                                                                                                                                                                                                                                 |  |              |              | 要求                                                                                                                                                      |     |
| Item                                                                             |        | Test Conditions                                                                                                                                                                                                                                                      |  |              |              | Requirements                                                                                                                                            |     |
| 4.5                                                                              | 手柄拔出强度 | 开关垂直于操作方向放置，手柄应能承受反方向实施20N.min.操作力。<br>The switch shall be placed perpendicular to the operating direction, and the handle shall be able to withstand the operating force of 20 N.min. applied in the opposite direction.                                            |  |              |              | 试验后手柄、盖板应无脱落、破损，开关应能动作<br>After the test, the handle and cover plate should be free of falling off and damage, and the switch should be able to operate |     |
| 4.6                                                                              | 接线端强度  | 开关接线端应能承受 10N 轴向拉力 10s±1s 的作用。<br>Switch terminals should be able to withstand the axial tension of 10N for 10s + 1s.                                                                                                                                                |  |              |              | 试验后接线端子应无脱落、破损，开关应能动作<br>After the test terminals should be without any fall off, damage, the switch should be able to function                         |     |
| 4.7                                                                              | 可焊性    | 在以下设定条件下进行测量：<br>Measurements shall be made following the test forth below:<br>(1) 焊接温度：245±5℃<br>Solder temperature:245±5℃<br>(2) 浸入时间：2±0.5s<br>Immersion time: 2±0.5s<br>对于其它步骤参考《GB5095.6-86》试验 12a<br>The other steps please refer to 《GB5095.6-86》<br>TEST 12a |  |              |              | 接线端粘锡面积≥95%<br>(除边缘外)<br>Except for the edge, the coating should cover a minimum 95%<br>(Except edges)                                                  |     |
| 4.7                                                                              |        | Solderability                                                                                                                                                                                                                                                        |  |              |              |                                                                                                                                                         |     |
| 5.极限电气性能：<br>Environmental Specification                                         |        |                                                                                                                                                                                                                                                                      |  |              |              |                                                                                                                                                         |     |
| 5.1                                                                              | 低温测试   | 样品应按照以下试验条件进行测试，试验后样品应放在常温及标准湿度的环境 1 小时做性能测试：<br>Following the test set forth below the sample shall be left in normal temperature and humidity conditions for 1 h before measurements are made:<br>(1) 温度：-40±2℃<br>Temperature: -40±2℃<br>(2) 时间：96h<br>time: 96h  |  |              |              | 接触电阻：≤200m Ω<br>Contact resistance: ≤200m Ω<br>绝缘电阻：≥10M Ω<br>Insulation resistance: ≥10M Ω<br>项目：3.3,4.1,4.2,4.3<br>Item: 3.3,4.1,4.2,4.3              |     |
| Resistance to low temperature                                                    |        |                                                                                                                                                                                                                                                                      |  |              |              |                                                                                                                                                         |     |

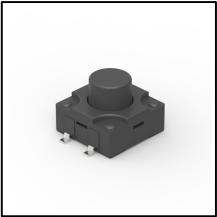
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| <div></div> |                                  | 产品承认书<br>SPECIFICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | 产品名称<br>Product name | 轻触开关<br>Tact Switch | 版本<br>Edition                                                                                                                                                                                                                                                                   | A   |
|                                                                                             |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | 型 号<br>Model         | TSX12311-065        | 页码<br>Page                                                                                                                                                                                                                                                                      | 5/8 |
| 项 目<br>Item                                                                                 |                                  | 试验条件<br>Test Conditions                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                      |                     | 要求<br>Requirements                                                                                                                                                                                                                                                              |     |
| 5.2                                                                                         | 高温测试<br>Heat resistance          | <p>样品应按照以下试验条件进行测试, 试验后样品应放在常温及标准湿度的环境中 1 小时做性能测试:</p> <p>Following the test set forth below the sample shall be left in normal temperature and humidity conditions for 1 h before measurements are made:</p> <p>(1) 温度: <math>85\pm 2^{\circ}\text{C}</math><br/>Temperature: <math>85\pm 2^{\circ}\text{C}</math></p> <p>(2) 时间: 96h<br/>time: 96h</p>                                                                                                              |  |                      |                     | <p>接触电阻: <math>\leq 200\text{m}\Omega</math><br/>Contact resistance: <math>\leq 200\text{m}\Omega</math></p> <p>绝缘电阻: <math>\geq 10\text{M}\Omega</math><br/>Insulation resistance: <math>\geq 10\text{M}\Omega</math></p> <p>项目: 3.3,4.1,4.2,4.3<br/>Item: 3.3,4.1,4.2,4.3</p> |     |
| 5.3                                                                                         | 温度周期性测试<br>Change of temperature | <p>根据下面的测试要求进行 5 次循环的温度周期性测试, 试验后样品应放在常温及标准湿度的环境中 1 小时后做性能测试。测试期间样品应保持干燥。</p> <p>After 5 cycles of following conditions, the sample shall be allowed to stand under normal temperature and humidity conditions for 1 h. and measurements shall be made. During the test water drops shall be removed.</p> <div></div> <p>1次循环/1 cycle</p>                                         |  |                      |                     | <p>接触电阻: <math>\leq 200\text{m}\Omega</math><br/>Contact resistance: <math>\leq 200\text{m}\Omega</math></p> <p>绝缘电阻: <math>\geq 10\text{M}\Omega</math><br/>Insulation resistance: <math>\geq 10\text{M}\Omega</math></p> <p>项目: 3.3,4.1,4.2,4.3<br/>Item: 3.3,4.1,4.2,4.3</p> |     |
| 5.4                                                                                         | 湿温测试<br>Moisture resistance      | <p>样品应按照以下试验条件进行测试, 试验后样品应放在常温及标准湿度的环境中 1 小时做性能测试:</p> <p>Following the test set forth below the sample shall be left in normal temperature and humidity conditions for 1 h before measurements are made:</p> <p>(1) 温度: <math>60\pm 2^{\circ}\text{C}</math><br/>Temperature: <math>60\pm 2^{\circ}\text{C}</math></p> <p>(2) 相对湿度: 90%~95%<br/>relative humidity: 90% to 95%</p> <p>(3) 时间: 96h<br/>time: 96h</p> <p>(4) 擦除水珠<br/>Water drops shall be removed.</p> |  |                      |                     | <p>接触电阻: <math>\leq 200\text{m}\Omega</math><br/>Contact resistance: <math>\leq 200\text{m}\Omega</math></p> <p>绝缘电阻: <math>\geq 10\text{M}\Omega</math><br/>Insulation resistance: <math>\geq 10\text{M}\Omega</math></p> <p>项目: 3.3,4.1,4.2,4.3<br/>Item: 3.3,4.1,4.2,4.3</p> |     |

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|                                                                                  |                        |                                                                                                                                                                                                                                                                                                                         | 型 号<br>Model            | TSX12311-065        | 页码<br>Page                                                                                                                                 | 6/8 |
| 项 目<br>Item                                                                      |                        |                                                                                                                                                                                                                                                                                                                         | 试验条件<br>Test Conditions |                     | 要求<br>Requirements                                                                                                                         |     |
| 5.5                                                                              | 盐雾试验<br>Salt Mist      | 在以下设定条件下进行测量：<br>The switch shall checked after following test:<br>(1) 温度：35±2℃<br>Temperature: 35±2℃<br>(2) 盐溶液浓度：5±1%（质量百分比）<br>salt solution: 5±1%(solids by mass)<br>(3) 时间：48±1h<br>time: 48±1h                                                                                                                    |                         |                     | 金属上没有腐蚀斑点<br>No remarkable corrosion shall be recognized in metal part                                                                     |     |
| 5.6                                                                              | IP 测试<br>IP test       | IP67（防水等级）在以下设定条件下进行测量：<br>IP67 (Waterproof grade)is measured under the following setting conditions:<br>开关在水深 1m 处持续 30 分钟，开关内部无水进入，取出晾干后测试。<br>Keep the switch at the water depth of 1 m for 30 minutes, no water will enter the switch, take it out and dry it before testing.                                       |                         |                     | 接触电阻：≤200m Ω<br>Contact resistance: ≤200m Ω<br>绝缘电阻：≥10M Ω<br>Insulation resistance: ≥10M Ω<br>项目：3.3,4.1,4.2,4.3<br>Item: 3.3,4.1,4.2,4.3 |     |
| 6.极限机械性能：<br>Endurance Specification                                             |                        |                                                                                                                                                                                                                                                                                                                         |                         |                     |                                                                                                                                            |     |
| 6.1                                                                              | 工作寿命<br>Operation life | 根据下面的测试要求进行测试：<br>Measurement shall be made following the test set forth below:<br>(1) DC 12V, 50mA 带负载<br>DC 12V,50 mA resistive load<br>(2) 按动速率：2 次/秒<br>Rate of operation: 2 times/s<br>(3) 按力：按力的 1.5 倍<br>Operating Force: Operating Force 1.5 times<br>(4) 平均无故障寿命：≥10 0000<br>Average Life Expectancy: ≥10 0000 |                         |                     | 接触电阻≤500mΩ<br>Contact resistance ≤500mΩ<br>按力：初值的±30%<br>Operating Force: initial value ±30%<br>项目：3.3,4.2,4.3<br>Item: 3.3,4.2,4.3        |     |

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|                                                                                             |      | SPECIFICATION                                                                                                                                                                 |  | 型 号  | TSX12311-065 | 页码                                      | 7/8 |
| 项 目                                                                                         |      | 试验条件                                                                                                                                                                          |  |      |              | 要求                                      |     |
| Item                                                                                        |      | Test Conditions                                                                                                                                                               |  |      |              | Requirements                            |     |
| 6.2                                                                                         | 耐冲击  | 加速度 500m/s²，脉冲持续时间 11ms，三个轴线的每个方向上，每个方向三次，共 18 次。<br>Acceleration of 500m/s², pulse duration 11ms, each direction of the 3 axis, 3 times in each direction, a total 18 times. |  |      |              | 项目：3,4.1,4.2,4.3<br>Item: 3,4.1,4.2,4.3 |     |
| Impact Shock Resistance                                                                     |      |                                                                                             |  |      |              |                                         |     |
| 7.焊接条件：<br>Soldering Conditions:                                                            |      |                                                                                                                                                                               |  |      |              |                                         |     |
| 7.1                                                                                         | 手工焊接 | 请按以下条件进行焊接：<br>Please practice according to below conditions:<br>(1) 焊锡温度：≦350℃<br>Soldering temperature: 350℃ Max<br>(2) 连续焊接时间：≦3s<br>Continuous soldering time: 3s Max     |  |      |              |                                         |     |
| Hand soldering                                                                              |      |                                                                                                                                                                               |  |      |              |                                         |     |







产品规格

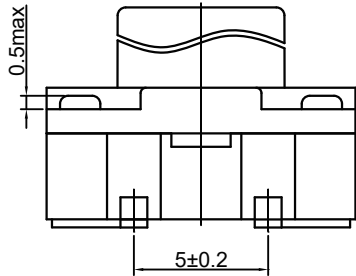
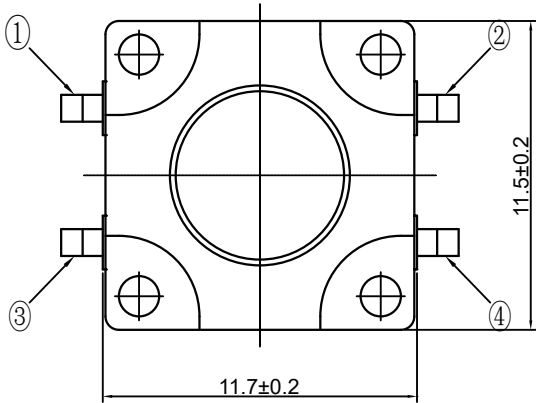
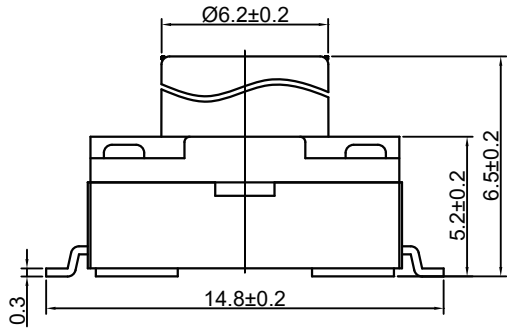
|        |               |
|--------|---------------|
| 工作方式:  | 瞬时接触          |
| 触点形式:  | 单刀单掷          |
| 安装方式:  | 直立            |
| 机械性能   |               |
| 动作力:   | 330±50gf      |
| 电气寿命:  | 10, 0000次     |
| 工作环境   |               |
| 环境温度:  | -40~+85℃      |
| 环境湿度:  | (40℃) ≤95%    |
| 电气性能   |               |
| 额定电负荷: | 50mA @ 12V DC |
| 耐电压:   | 250VAC /1分    |
| 接触电阻:  | 100mΩ Max.    |
| 绝缘电阻:  | 100MΩ Min.    |
| 行程:    | 0.35±0.1mm    |
| IP等级:  | IP67          |

物料

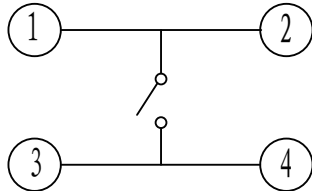
|           |             |
|-----------|-------------|
| 8. 盖板:    | GP. PPA 咖啡色 |
| 7. 手柄:    | GP. PPA 咖啡色 |
| 6. 橡胶垫:   | 橡胶          |
| 5. 防水膜:   | PIF薄膜       |
| 4. 防水内手柄: | GP. PA66 黑色 |
| 3. 簧片:    | 不锈钢镀银       |
| 2. 底座:    | GP. PPA 咖啡色 |
| 1. 接线片:   | 黄铜镀银        |

包装

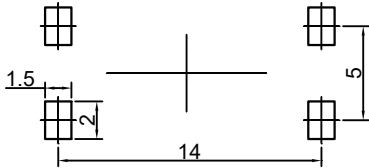
|      |    |
|------|----|
| 散装   |    |
| 内包装: | 编带 |
| 外包装: | 纸箱 |



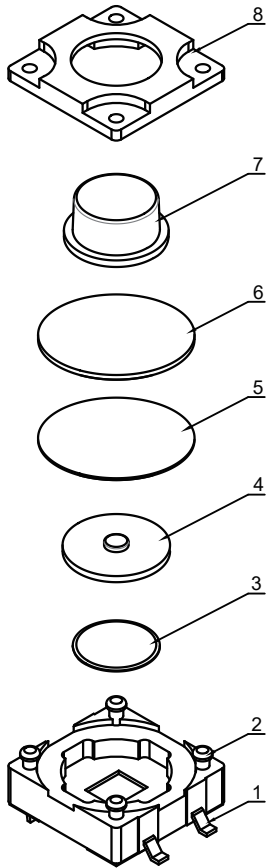
CIRCUIT DIAGRAM



P.C.B. LAYOUT



Professional Manufacturer Since 2000



借通用件登1

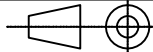
描 图

校 描

旧底图总号

签 字

日 期

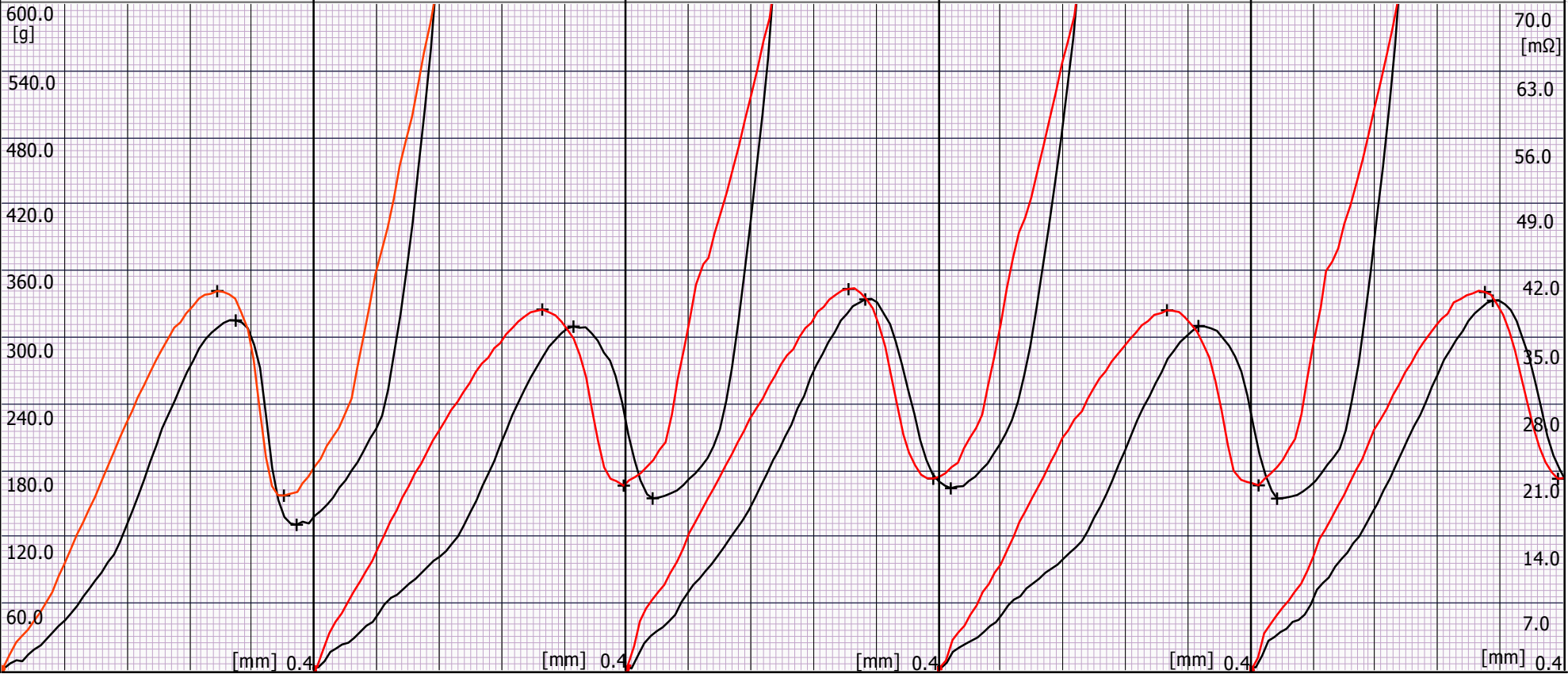
|     |     |       |     |     |                                                                                                                           |                          |    |     |     |     |            |
|-----|-----|-------|-----|-----|---------------------------------------------------------------------------------------------------------------------------|--------------------------|----|-----|-----|-----|------------|
|     |     |       |     |     | 防水轻触开关                                                                                                                    | TSX12311-065D531DH-R0500 |    |     |     |     |            |
| 标记  | 处数  | 更改文件号 | 签 名 | 日 期 |                                                                                                                           |                          | 阶段 | 标 记 | 质 量 | 比 例 | 版本         |
| 设 计 | 余嘉诚 |       |     |     |                                                                                                                           | 视图                       |    |     |     | 4:1 | B/0        |
| 审 核 | 朱树清 |       |     |     | <br>Dirnensions are shown:mm(inches) | 第1张                      |    | 共1张 |     |     | 温州康宏电子有限公司 |
| 批 准 | 徐君辉 |       |     |     |                                                                                                                           | 2025. 05. 23             |    |     |     |     |            |

产品名称  
Product name:  
产品型号  
Model No:

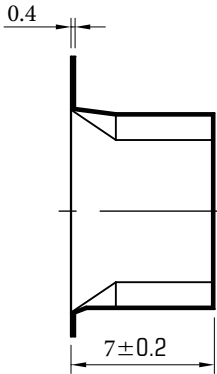
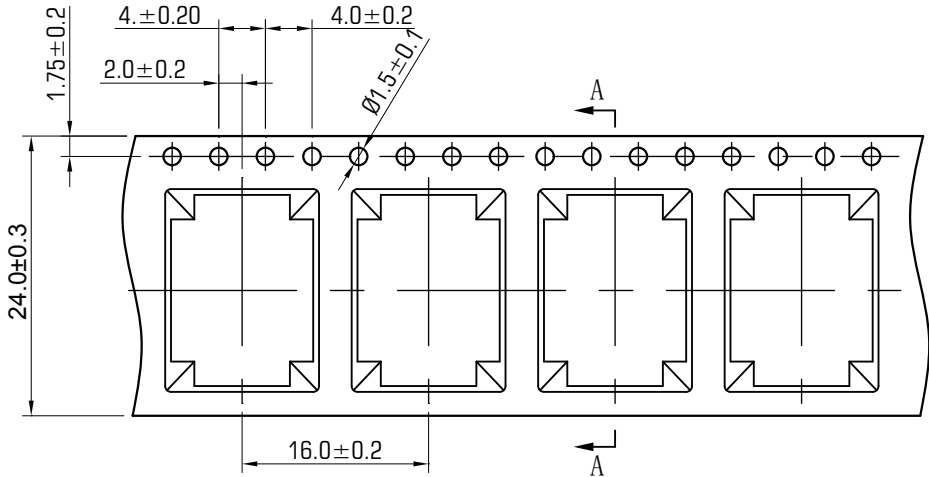
客户名称  
Customer:  
制造批号  
Lot No:

测试日期  
Test Date:  
测试人员  
Tester:

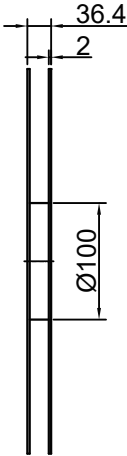
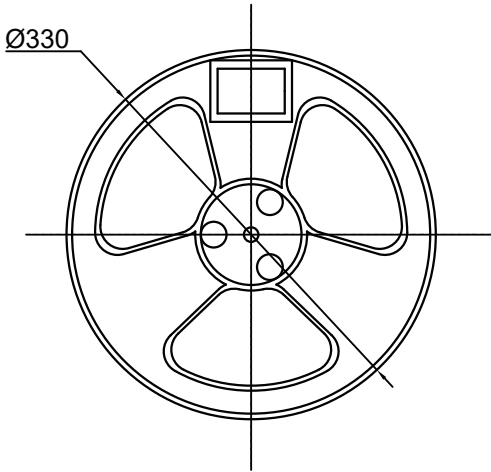
| NO 1-6 |         |      | NO 1-7 |         |      | NO 1-8 |         |      | NO 1-9 |         |      | NO 1-10 |         |      |
|--------|---------|------|--------|---------|------|--------|---------|------|--------|---------|------|---------|---------|------|
|        | g       | mm   |        | g       | mm   |        | g       | mm   |        | g       | mm   |         | g       | mm   |
| CP     | 341.50  | 0.28 | CP     | 324.83  | 0.29 | CP     | 343.33  | 0.28 | CP     | 324.30  | 0.29 | CP      | 340.62  | 0.30 |
| CL     | 157.18  | 0.36 | CL     | 166.14  | 0.40 | CL     | 172.43  | 0.39 | CL     | 166.46  | 0.41 | CL      | 172.29  | 0.39 |
| CP-CL  | 184.33  | 54%  | CP-CL  | 158.69  | 49%  | CP-CL  | 170.90  | 50%  | CP-CL  | 157.84  | 49%  | CP-CL   | 168.33  | 49%  |
| CP-RL  | 210.69  | 62%  | CP-RL  | 170.17  | 52%  | CP-RL  | 179.57  | 52%  | CP-RL  | 169.80  | 52%  | CP-RL   | 177.86  | 52%  |
| RP     | 315.01  | 0.30 | RP     | 309.57  | 0.33 | RP     | 334.05  | 0.31 | RP     | 309.90  | 0.33 | RP      | 332.93  | 0.31 |
| RL     | 130.81  | 0.38 | RL     | 154.66  | 0.43 | RL     | 163.76  | 0.42 | RL     | 154.50  | 0.43 | RL      | 162.77  | 0.42 |
| SWon   | 1.81    | 0.00 | SWon   | 1.59    | 0.00 | SWon   | 0.00    | 0.00 | SWon   | 1.12    | 0.00 | SWon    | 1.98    | 0.00 |
| SWoff  | 0.00    | 0.00 | SWoff  | 0.00    | 0.00 | SWoff  | 0.00    | 0.00 | SWoff  | 0.00    | 0.00 | SWoff   | 0.00    | 0.00 |
| R      | 5005.00 | 0.00 | R      | 5005.00 | 0.00 | R      | 5005.00 | 0.00 | R      | 5005.00 | 0.00 | R       | 5005.00 | 0.00 |



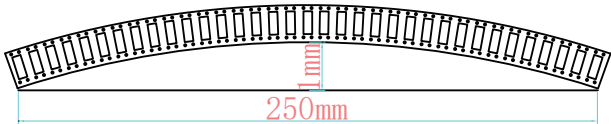
开关（荷重-行程）曲线测试图



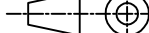
A-A剖面



- 说明:
- 10个边孔的累计公差不能超过 $\pm 0.2\text{mm}$ .
  - 材料规格: PS 透明抗静电, 厚度 0.5mm.
  - 13吋卷轮包装零件总颗数 $\geq 528$ 颗. (前段空包颗数 $\geq 14$ 颗,实际包装零件颗数:500颗,后段空包颗数 $\geq 14$ 颗).
  - 载带在250mm长度以内最大弯曲度不超过 1mm (见下图)



|        |
|--------|
| 借通用件登记 |
| 描 图    |
| 校 描    |
| 旧底图总号  |
| 签 字    |
| 日 期    |

|     |     |       |     |     |      |                                                                                                                                                                                   |     |     |     |     |
|-----|-----|-------|-----|-----|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|
|     |     |       |     |     | 轻触开关 | TSX12311-065D531DH-R0500                                                                                                                                                          |     |     |     |     |
| 标记  | 处数  | 更改文件号 | 签 名 | 日 期 |      |                                                                                                                                                                                   |     |     |     |     |
| 设 计 | 余嘉诚 |       |     |     |      | <div>视图</div> <div></div> <div>Dimensions are shown:mm(inches)</div> <div>2025. 05. 23</div> | 阶段  | 标 记 | 质 量 | 比 例 |
| 审 核 | 朱树清 |       |     |     |      |                                                                                                                                                                                   |     |     | 1:1 | B/0 |
| 批 准 | 徐君辉 |       |     |     | 第1张  |                                                                                                                                                                                   | 共1张 |     |     |     |
|     |     |       |     |     |      | 温州康宏电子有限公司                                                                                                                                                                        |     |     |     |     |