



# 规格书

## SPECIFICATION

|               |        |                   |
|---------------|--------|-------------------|
| CUSTOMER NAME | 客户名称:  |                   |
| CUSTOMER NO.  | 客户编号:  |                   |
| SERIES        | 系 列:   | 迷你型滑动开关           |
| MODEL NO.     | 型 号:   | XB-MSK-301        |
| DRAWING NO.   | 图 形 号: | Mini Slide Switch |

If specification of this product meets your request, please confirm all the items of it and return to us with signature and stamp, it will be basis of our production and record. Thanks your cooperation in advance!

若此产品规格符合贵司要求，敬请确认此规格书内所有项目  
并签名和盖章后回传给我司，以作我司产品制作之

依据和存档之用，多谢合作！

## EXAMINE & APPROVAL 审批

|                                       |                 |
|---------------------------------------|-----------------|
| APPROVE 接受                            | NOT APPROVE 不接受 |
| SIGNATURE 签署      STAMP盖章      DATE日期 |                 |

|                                                       |                                                       |                                                      |                                                      |
|-------------------------------------------------------|-------------------------------------------------------|------------------------------------------------------|------------------------------------------------------|
| PREPARED BY.制表人                                       | CHECKED BY.校对                                         | APPROVED BY.审核                                       | APPROVAL BY.批准                                       |
| <div>研发部</div> <div>戴海明</div> <div>2022. 06. 08</div> | <div>品质部</div> <div>黄自清</div> <div>2022. 06. 08</div> | <div>工程部</div> <div>庞军</div> <div>2022. 06. 08</div> | <div>总经办</div> <div>吴量</div> <div>2022. 06. 08</div> |

东莞市溪榜电子有限公司

# Dong guan Xi Bang Electronics Co., Ltd

地址：广东省东莞市黄江镇合路工业区

**Address:He Lu Industrial Zone, Huangjiang Town  
Dongguan City, Guangdong Province**

**Tel: (0769)82055138/82056828**

**Fax:(0769)83663452**

邮箱: [admin@alspr.com](mailto:admin@alspr.com)    [switch@alspr.com](mailto:switch@alspr.com)

<http://www.alpsr.cn/>    <http://www.alpsr.com/>

Dong Guan XB ElectronicsCo., Ltd

AccountNumber: 705540238

BankName: CitibankN.A.,HongKongBranch

Country/Region: Hong Kong

BankCode:006

BankAddress: 3GardenRoad, Central, Hong Kong

SWIFT/BIC: CITIHKHX (CITIHKHXXXX\*If 11 characters are required)

**MAiL:** HK@ALPSR. CN      XB@ALPSR. CN

## Quality core! Afterburner for Made in China!



**东莞市溪榜电子有限公司**

DONG GUAN XI BANG ELECTRONICS CO., LTD.

文件编号

**XB-SP-20018**

发布日期

**2009 年 03 月 25 日****SPECIFICATION 规格书**

第 A/0 版

第 1 页 共 3 页

DRAWN 制订

柳小梅

APPV. 审批

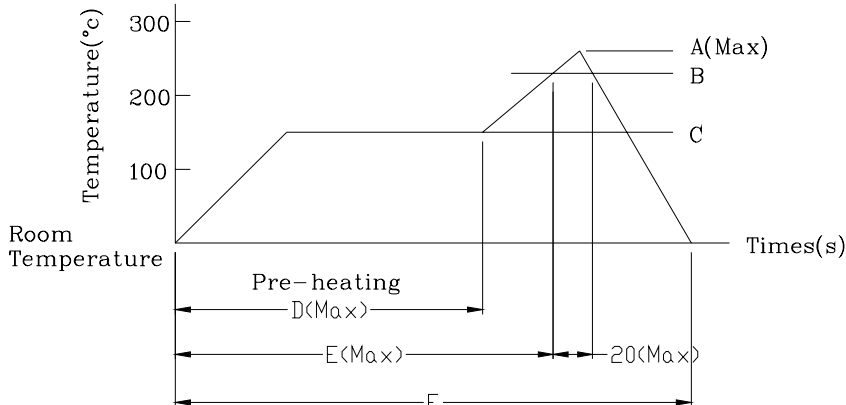
郭洞庭

**TITLE (产品系列): 2(H)mm, 2mm-TRAVEL MINI SLIDE SWITCH****MODEL NO. (产品名称): XB-MSK-301****P/N (产品编号):****1. RATING (额定值): DC 4V 0.3 A****2. FUNCTION (接触型式): 1POLE, 3THROWS****3. TIMING (时间特性): NON SHORTING****4. ELECTRICAL CHARACTERISTICS (电气性能规格):**

| ITEM 项目                                     | TEST CONDITIONS 测试条件                                                                                                                                                                                                                               | PERFORMANCE 规格                                             |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| 4.1<br>INITIAL CONTACT RESISTANCE<br>初始接触电阻 | MEASURED AT SMALL CURRENT (100 mA OR LESS)<br><b>1000Hz</b> 在微小电流 (100mA) 以下测试.                                                                                                                                                                    | 70mΩ MAX.<br>70 毫欧以下.                                      |
| 4.2<br>INSULATION RESISTANCE<br>绝缘电阻        | APPLY A VOLTAGE OF 500V DC FOR 1 MIN. TO FOLLOWING PORTIONS AFTER WHICH MEASUREMENT SHALL BE MADE:<br>(1) BETWEEN BODY AND CONDUCTOR<br>(2) BETWEEN CONDUCTORS NOT TO BE CONTACT<br>输入 500V DC 电压 1 分钟, 按以下接触方法测试:<br>(1) 接触端子之间.<br>(2) 插座体与排脚之间. | 100MΩ MIN.<br>100 兆欧以上.                                    |
| 4.3<br>DIELECTRIC STRENGTH<br>耐电压           | AC 500V rms (50-60Hz) FOR 1 MIN TRIP CURRENT: 0.5 mA<br>(1) BETWEEN TERMINALS.<br>(2) BETWEEN INDIVIDUAL TERMINALS AND FRAME.<br>输入 AC 500V (50-60Hz) 电压, 1 分钟感度电流为 0.5 mA, 按以下接触方法测试:<br>(1) 接触端子之间.<br>(2) 插座体与端子之间.                             | WITHOUT DAMAGE SUCH AS INSULATION BREAKDOWN.<br>没有绝缘破坏等异常. |

**5. MECHANICAL CHARACTERISTICS (机械性能规格)**

| ITEM 项目                                          | TEST CONDITIONS 测试条件                                                                                                                                                                                                                                                                                                                  | PERFORMANCE 规格                                                                                                                    |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 5.1<br>OPERATING FORCE WITH DETENT<br>作动力        | REFER TO THE DIMENSIONS.                                                                                                                                                                                                                                                                                                              | b→a, b→c 2.5±1N<br>a→b, c→b 1.75±1N                                                                                               |
| 5.2<br>TERMINAL STRENGTH<br>端子强度                 | A STATIC LOAD OF (300 gf) SHALL BE APPLIED TO THE TIP OF THE TERMINAL FOR 1 MIN. IN ANY DIRECTION.<br>在任意一个方向的先端上加力度 (300 gf) 1 分钟.                                                                                                                                                                                                   | ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED WITHOUT DAMAGE OR EXCESSIVE LOOSENESS OF TERMINALS.<br>在排脚中没有裂开. 松动等异常, 满足于机械、电器性能. |
| 5.3<br>STANDARD ATMOSPHERIC CONDITIONS<br>测试标准状态 | UNLESS OTHERWISE SPECIFIED. THE STANDARD RANGE OF ATMOSPHERIC CONDITIONS FOR MAKING MEASUREMENTS AND TESTS ARE AS FOLLOWS:<br>(1) AMBIENT TEMPERATURE: 5°C TO 35°C<br>(2) RELATIVE HUMIDITY : 45% TO 85%<br>(3) AIR PRESSURE : 80Kpa TO 106Kpa<br>在没有指定的情况下测试温度、湿度、气压如下:<br>(1) 温度为 5~35°C<br>(2) 湿度为 45%~85%<br>(3) 气压为 80Kpa~106Kpa |                                                                                                                                   |

|                                                                                                                                                                        |                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  |         |                                                                                                                                  |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------|----------------------------------------------------------------------------------------------------------------------------------|--------|
| <div></div> <div>东莞市溪榜电子有限公司</div> <div>DONG GUAN XI BANG ELECTRONI CS CO., LTD.</div> |                                                    | 文件编号                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | XB-SP-20018      |         |                                                                                                                                  |        |
|                                                                                                                                                                        |                                                    | 发布日期                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2009 年 03 月 25 日 |         |                                                                                                                                  |        |
| SPECIFICATION                                                                                                                                                          |                                                    | 规格书                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  | 第 A/0 版 | 第 2 页 共 3 页                                                                                                                      |        |
| 5.4                                                                                                                                                                    | PRACTICAL TEMPERATURE RANGE<br>使用温度范围              | -10℃~+60℃<br>在-10℃~+60℃温度内使用                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                  |         |                                                                                                                                  |        |
| 6. ENDURANCE CHARACTERISTICS (耐久性):                                                                                                                                    |                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  |         |                                                                                                                                  |        |
| ITEM 项目                                                                                                                                                                |                                                    | TEST CONDITIONS 测试条件                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |         | PERFORMANCE 规格                                                                                                                   |        |
| 6.1                                                                                                                                                                    | SOLDERA-BILITY TEST<br>可焊性试验                       | THE TOP OF THE TERMINALS SHALL BE DIPPED 2mm IN THE SOLDER BATH OF 230±5℃ FOR 3±0.5 SECONDS.<br>端子顶部被浸入锡焊池中 2mm 深, 温度为 230±5℃, 时间为 3±0.5 秒.                                                                                                                                                                                                                                                                                                                                    |                  |         | THE AREA OF SOLDERING SHOULD BE OVER 75%<br>焊接面积要有 75%以上.                                                                        |        |
| 6.2                                                                                                                                                                    | RESISTANCE TO SOLDERING HEAT TEST<br>耐焊性试验         | SOLDER BATH METHOD:<br>SOLDER TEMPERATURE 260±5℃IMMERSION TIME 3±0.5 SEC IMMERSION DEPTH UP TO THE SURFACE OF THE BOARD THICKNESS OF PRINTED WIRING BOARD 0.8 mm DIMENSIONS OF COMPONENT HOLES IN THE PRINTED WIRING BOARD SHALL BEING ACCORDANCE WITH THOSE SPEC IFIED IN THIS SPECIFICATION.<br>焊炉焊接的时候温度控制在 260±5℃,过炉时间为 3±0.5 秒,于基板厚度为 0.8mm                                                                                                                               |                  |         | THERE SHALL BE NO DEFORMATION OF THE SWITCH. MECHANICAL AND ELEC TRICAL CHARACTERISTICS SHALL BE SATISFIED.<br>本体无变形,满足于机械、电气性能。 |        |
| 6.3                                                                                                                                                                    | EXAMPLE OF REFLOW SOLDERING CONDITION<br>回流焊方式参考举例 | 1.HEATING METHOD: DOUBLE HEATING METHOD WITH INFRARED HEATER;<br>加热方式: 为远红外线加热的上下加热方式;<br>2.TEMPERATURE MEASUREMENT: THERMOCOUPLE 0.1TO 0.2ΦCA(K) OR CC(T) AT SOLDERING PORTION(COPPER FOIL SURFACE); AHEAT RESISTING TAPE SHOULD BE USED FOR FIXED MEASUREMENT;<br>温度测量方式: 用Φ0.1-Φ0.2 的 CA(K) 或 CC(T) 进行测量,在焊接的连接部位置(铜箔面)测量,固定方式使用耐热胶带;<br>3.TEMPERATURE PROFILE:<br>温度分布:<br><div></div> |                  |         |                                                                                                                                  |        |
|                                                                                                                                                                        |                                                    | A (°C) 3s MAX                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | B (°C)           | C (°C)  | D (s)                                                                                                                            | E (s)  |
|                                                                                                                                                                        |                                                    | 250                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 230              | 150     | 120                                                                                                                              | --     |
|                                                                                                                                                                        |                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  |         |                                                                                                                                  | F (s)  |
|                                                                                                                                                                        |                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  |         |                                                                                                                                  | 180MAX |

|                                                                                                                                                |                       |                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <b>东莞市溪榜电子有限公司</b><br>DONG GUAN XI BANG ELECTRONICS CO., LTD. |                       | 文件编号                                                                                                                                                                                                                                                                                         | <b>XB-SP-20018</b>                                                                                                                                                              |
|                                                                                                                                                |                       | 发布日期                                                                                                                                                                                                                                                                                         | <b>2009 年 03 月 25 日</b>                                                                                                                                                         |
| <b>SPECIFICATION 规格书</b>                                                                                                                       |                       | <b>第 A/0 版</b>                                                                                                                                                                                                                                                                               | <b>第 3 页 共 3 页</b>                                                                                                                                                              |
| 6.4                                                                                                                                            | LIFE TEST<br>寿命试验     | <p>WITHOUT LOAD:<br/>AN ACTUATOR SHALL BE SUBJECT TO 10,000 CYCLES AT A SPEED OF 15 TO 18 CYCLES FOR 1 MIN.</p> <p>无负荷:<br/>操作者以每分钟 15~18 次的频率作 10,000 回之无负荷测试.</p>                                                                                                                          | <p>(1) CONTACT RESISTANCE SHALL BE 130 mΩ MAX.</p> <p>(2) MECHANICAL AND ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED.</p> <p>(1) 接触电阻不能超于 130 mΩ</p> <p>(2) 其它、满足于机械、电器性能</p> |
| 6.5                                                                                                                                            | COLD TEST<br>耐冷试验     | <p>THE SWITCH SHALL BE STORED AT A TEMPERATURE OF -20±3℃ FOR 96 HOURS AND THEN IT SHALL BE SUBJECTED TO THE CONTROLLED RECOVERY CONDITIONS FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE.</p> <p>放置在温度-25±3℃中 96 小时后,再放置常温常湿中 1 小时来测定。</p>                                                | <p>THERE SHALL BE NO DAMAGE ON APPEARANCE.<br/>MECHANICAL AND ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED.<br/>外观无异常, 满足于机械, 电器性能.</p>                                        |
| 6.6                                                                                                                                            | HEAT TEST<br>耐热试验     | <p>THE SWITCH SHALL BE STORED AT A TEMPERATURE OF 80±2℃ FOR 96 HOURS. AND THEN IT SHALL BE SUBJECTED TO THE CONTROLLED RECOVERY CONDITIONS FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE.</p> <p>放置在温度 85±2℃中测试 96 小时后,再放置正常室温中 1 小时来测定。</p>                                              |                                                                                                                                                                                 |
| 6.7                                                                                                                                            | HUMIDITY TEST<br>潮湿试验 | <p>THE SWITCH SHALL BE STORED AT A TEMPERATURE OF 40±2℃ AND A HUMIDITY OF 90% TO 95% FOR 96 HOURS. THEN THE SWITCH SHALL BE MAINTAINED AT STANDARD ATMOSPHERIC CONDITION FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE.</p> <p>放置 40±2℃的相对湿度为 90%~95%环境中 96 小时后,再将样版放在正常环境 1 小时后进行测试。</p> |                                                                                                                                                                                 |
|                                                                                                                                                |                       |                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                 |