



**标准&定制开关连接器产品制造商**  
DONG GUAN XI BANG ELECTRONICS CO., LTD.

# 规格书

## SPECIFICATION

CUSTOMER NAME 客户名称: \_\_\_\_\_  
 CUSTOMER NO. 客户编号: \_\_\_\_\_  
 SERIES 系列: 倾斜震动开关  
 MODEL NO. 型号: XB-SW-3827-45TD  
 DRAWING NO. 图形号: Tilt 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 style="border: 1px solid red; padding: 2px; display: inline-block;">研发部</div> <div style="border: 1px solid red; padding: 2px; display: inline-block;">戴海明</div> <div style="border: 1px solid red; padding: 2px; display: inline-block;">2022. 06. 08</div>	<div style="border: 1px solid red; padding: 2px; display: inline-block;">品质部</div> <div style="border: 1px solid red; padding: 2px; display: inline-block;">黄自清</div> <div style="border: 1px solid red; padding: 2px; display: inline-block;">2022. 06. 08</div>	<div style="border: 1px solid red; padding: 2px; display: inline-block;">工程部</div> <div style="border: 1px solid red; padding: 2px; display: inline-block;">庞军</div> <div style="border: 1px solid red; padding: 2px; display: inline-block;">2022. 06. 08</div>	<div style="border: 1px solid red; padding: 2px; display: inline-block;">总经办</div> <div style="border: 1px solid red; padding: 2px; display: inline-block;">吴量</div> <div style="border: 1px solid red; padding: 2px; display: inline-block;">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    switch@alspr.com

http://www.alspr.cn/    http://www.alspr.com/

**Dong Guan XB Electronics Co., Ltd**

Account Number: 705540238

Bank Name: Citibank N. A., Hong Kong Branch

Country/Region: Hong Kong

Bank Code: 006

Bank Address: 3 Garden Road, 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!

## 产品规格书 Product Details specification

产品名称 Title	File No.	Version	Date	Page
XB-SW-3827-45TD 倾斜开关	XB-SW-3D-147	2023-B2	2023.02.09	2/6

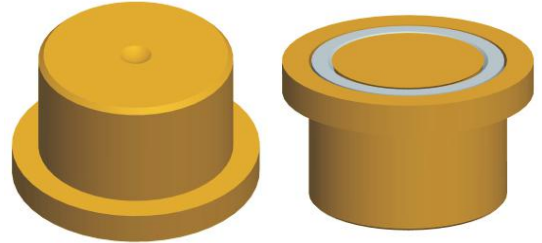
### ■ 功能 Function

1. 水平倾斜检测

Horizontal tilt anti-fall detecting.

2. 垂直翻转检测

Vertical flip anti-fall detecting.



### ■ 应用产品 Applications

1. 智能家用电器 Smart home appliances

2. 倾倒安全防护电器 Tilting safety protection circuit

3. 智能电子设备 Intelligent electronic equipment

### ■ 产品特性 Features

1. XB-SW-3827 是滚珠型倾斜感应开关。

XB-SW-3827 is Ball type tilt vibration sensitive switch.

2. 产品倾斜 0-35 度处于断开 OFF 状态，当产品向任一方向倾斜且超过  $45 \pm 10$  度时，开关会处于通路 ON 状态。

When the product tilt to 0-35 is in OFF-state, as the products tilt to any direction and exceed  $45 \pm 10$  degrees, switch stay in a disconnect ON-state.

3. 本规格产品是完全密封式封装，可防水、防尘。

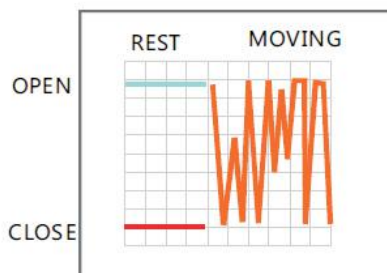
Product completely airtight, waterproof, dustproof.

4. 开关材质 ROHS 环保，完全替代水银开关。

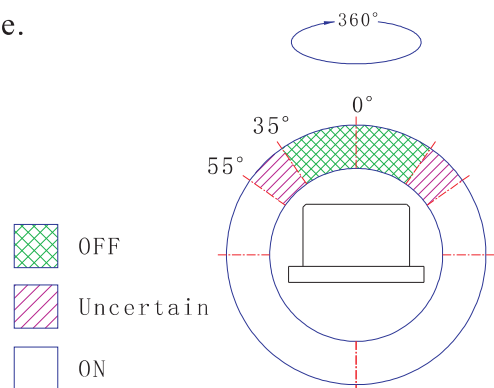
Material compliant with ROHS directive, replace the mercury switch.

5. 开关信号简单、电路线路设计简单、价格经济。

Simple for switch signals and circuit, and economic price.



触发波形图





## 产品规格书 Product Details specification

产品名称 Title	File No.	Version	Date	Page
XB-SW-3827-45TD 倾斜开关	XB-SW-3D-147	2023-B2	2023.02.09	3/6

### ■ 电器特性 Electrical characteristics:

1	电压	Voltage	1-6V
2	电流	Current	2uA-10mA
3	导通方式	Conduction mode	Discontinuous conduction mode 非连续导通
4	闭路电阻	Closed resistance	<30 Ω
5	绝缘电阻	Insulation resistance	>10 MΩ

### ■ 机械特性 Mechanical characteristics:

1	耐温	Temperature range	Operating: -40°C to 85°C
2	端子拉力	Pull force of terminal	500gf for 1 minute
3	盐雾测试	Salt mist test	95% RH, 40°C for 24 hours
4	操作寿命	Operating lifespan	200,000 cycles

### ■ 材料列表 Bill of material:

1	铜帽	Copper cap	Brass ,gold-plated
2	绝缘环	Insulation	Brass ,Parylene-plated
3	滚珠	Ball	Brass ,gold-plated
4	铜塞	Guide cup	Brass ,gold-plated

### ■ 焊接特性 Welding characteristics

1. 手工焊: 320°C ± 10°C, 2-3秒。

Manual welding : 320°C ± 10°C, 2-3s.

2. 回流焊温度时间: 见第4页。

Reflow soldering humidity time: P4.

3. 焊锡: 含锡量100%。

Solder tin: tin content 100%.

4. 不可使用强酸、碱性助焊剂。

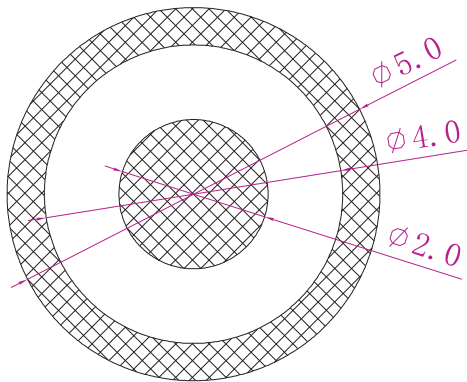
Do not use strong acid alkali flux.

## 产品规格书 Product Details specification

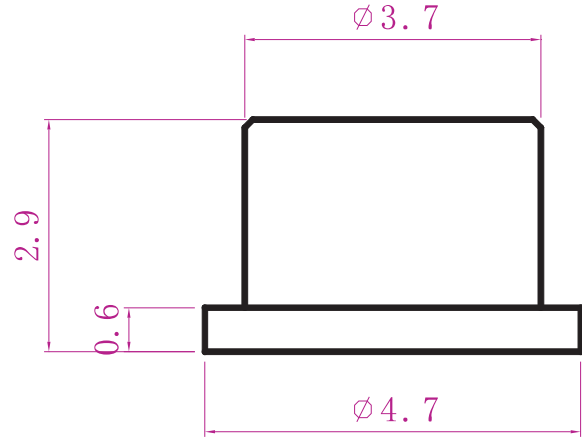
产品名称 Title	File No.	Version	Date	Page
XB-SW-3827-45TD 倾斜开关	XB-SW3D-147	2023-B2	2023.02.09	4/6

### 尺寸 SIZE

Unit: mm,  
Tolerance  $\pm 0.15$



焊盘位



### 注意事项 Note

1. 如果该产品要用于高安全性产品及耐久性极高的设备中（如生命安全设备、航空设施、防灾装置），请确认是否合用，或咨询我司了解详情。

If the product used for high security products and durability of extremely high equipment (such as life safety equipment, aviation facilities, disaster prevention device), please confirm whether a share, can seek advice our company for details.

2. 请勿超负荷使用，以防发生火灾。

In case of fire, Please do not overload applicable.

3. 焊接温度或时间超过规范时，会造成开关解体。

The welding temperature or time more than standard, can cause switch collapse.

4. 勿使用水溶性助焊剂、可能会造成开关损坏。

Do not use water solubility flux. May cause damage to the switch.

5. 勿使用溶剂清洗开关。

Do not use solvent wash switch.

6. 本开关导通率为98%以上（导通率是指开关每100次动作中，可以良好导通的比率）。

This switch conduction rate of 98% (conductivity rate per 100 times value switch actions, can good conduction ratio).

7. 溪榜公司只承担本产品本身不良问题,对不良品进行退换货,不承担其它连带费用责任。

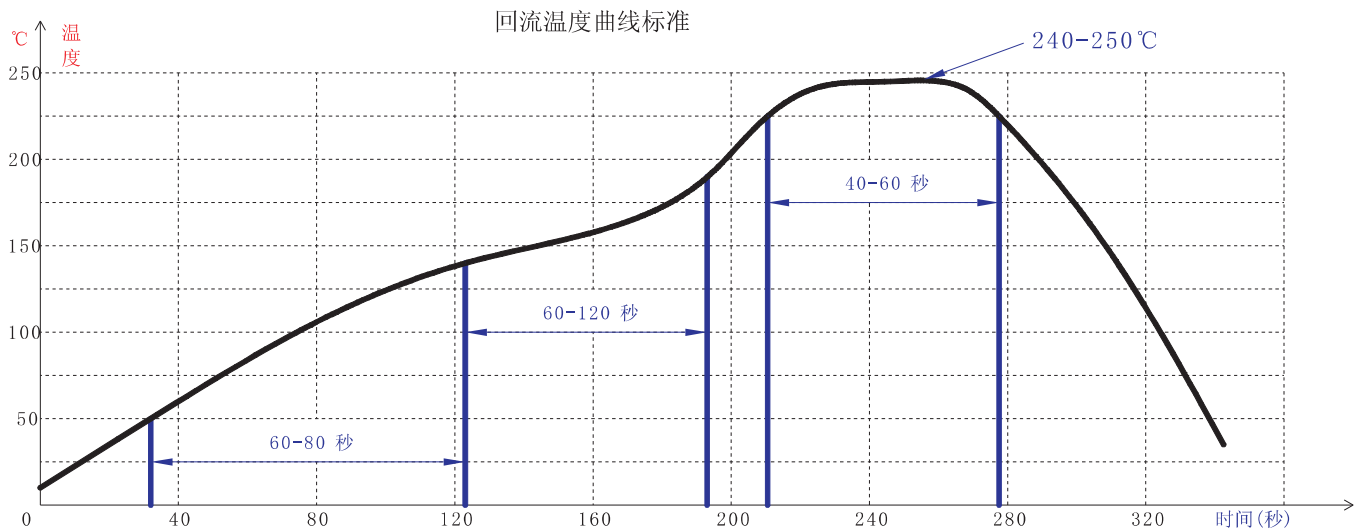
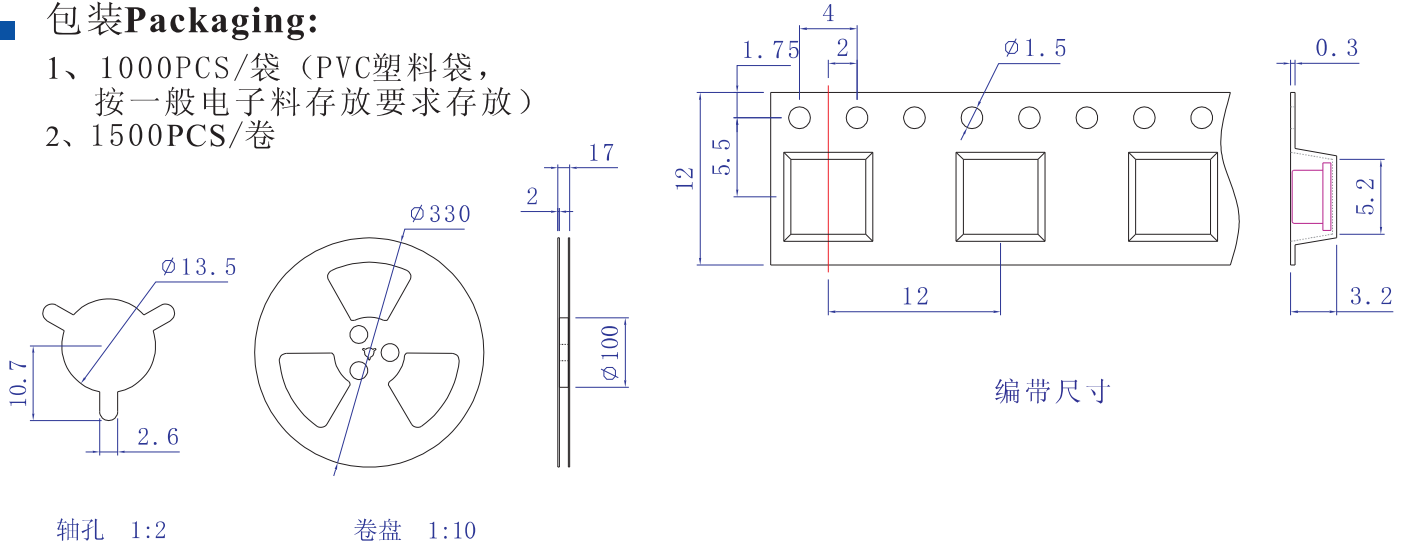
Xibang company is only responsible for the defective problems of the product itself, return and exchange the defective products, and does not bear other joint and several expenses.

## 产品规格书 Product Details specification

产品名称 Title	File No.	Version	Date	Page
XB-SW-3827-45TD 倾斜开关	XB-SW-3D-147	2023-B2	2023.02.09	5/6

### ■ 包装 Packaging:

- 1000PCS/袋 (PVC塑料袋, 按一般电子料存放要求存放)
- 1500PCS/卷



### 管制要点

项目	温度范围(°C)	维持时间(秒)	温度斜率 (°C/秒)
预热区	50-140	60-80	< 3
恒温区	140-190	60-120	< 1
回流区	217以上	40-60	< 2
峰值温度	240-250°C		
冷却区	降温斜率 < 3°C/秒		
链速	70-85 cm/min		

地址：广东省东莞市黄江合路工业区

Add: Huangjianghe Road Industrial Zone, Dongguan City, Guangdong Province

TEL: 0769-82055138 82056828  
http://www.alpsr.cn www.alpsr.com

Fax: 0769-83663452  
E-mail: XB@ALPSR.CN



## 产品规格书 **Product Details specification**

产品名称 Title	File No.	Version	Date	Page
<b>XB-SW-3827-45TD 倾斜开关</b>	<b>XB-SW-3D-147</b>	<b>2023-B2</b>	<b>2023.02.09</b>	<b>6/6</b>

### ■ 测试 Test

溪榜此类产品已通过盐雾、导通、焊接、耐温、寿命技术参数测试。  
Xibang has passed the tests of salt spray, conduction, welding, temperature resistance and service life.

### ■ 限制和警告 Restrictions and warnings

本产品不适用于：可导致人身伤害或死亡的安全设备上使用，买方在此类应用程序中使用本产品时，由买方自担风险。  
This product is not applicable to use on safety equipment that may cause personal injury or death. When the buyer uses this product in such application, the buyer shall bear the risk.

### ■ 系统集成测试 System integration test

产品发布前应进行全面的测试，以确保系统集成不会导致无法预料的问题。  
系统集成商承担目标成品安全的最终责任。  
Comprehensive testing shall be conducted before product release to ensure that system integration will not lead to unexpected problems.  
The system integrator bears the ultimate responsibility for the safety of the target finished product.

### ■ 注意 Note

由溪榜所提供的资料信息，为准确可靠的产品资料信息。但上此文档可能包含错误和遗漏。因此设计工程师应该以本资料信息仅作参考，而不是作为主要的设计标准，并应对包含此类。溪榜产品或任何溪榜其它产品执行全方位测试。溪榜不承担任何责任。溪榜公司有权在不影响产品功能的情况自行变更内部结构。  
The information provided by Xibang is accurate and reliable product information. However, this document may contain errors and omissions. Therefore, the design engineer should use this information for reference only, not as the main design standard, and should include such information. Perform a full range of tests on Xibang products or any other Xibang products. Lark does not take any responsibility. The company has the right to change the internal structure without affecting the product function.