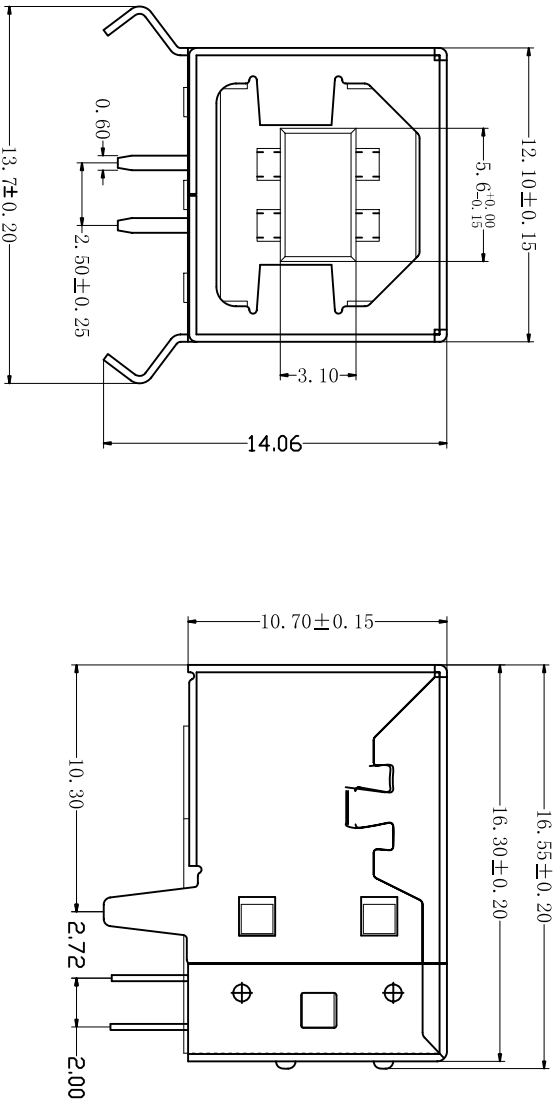


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MARK	SIGN	DAET	ECN NO.	REVISIONS	B/D REV.



NOTE:

1. MATERIAL:
- a. HOUSING: PBT GLASS FIBRE UL94 V-0
 - b. CONTACT: BRASS T=0.25mm
(SURFACE PLATING: Au10" + Sn80-100u" + Ni60u")
 - c. SHEEL: BRASS T=0.3mm IRON T=0.3mm
(SURFACE PLATING: Cu80-100u" Ni100u"-120u")



P.C.B. LAYOUT

东莞市商旗电子有限公司					
UNIT	MM	DRAWN	LANKY	TITLE	USB Bf成品 (DIP)
SCALE	1 : 1	VERIFIED		PART NO.	ST-USB-009A
DATE	2006-08-17	APPROVED		FILE NO.	
STATUS: DRAWING: 1: 2.0.00 SPECIFIED: 2.0.00 DATE: 2006-08-17 REV. 2.1					



SUNGTECH(DONGGUAN) ELECTRONIC CO.,LTD

PRODUCT SPECIFICATION

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1. SCOPE (适用范围)

This product specification defines the product performance and the test methods to ascertain the performance of the USB.,which is designed and manufactured by sungtech.

本产品规格书规定由商旗电子设计生产的 USB 连接器产品的特性及测试方法

2. PRODUCT NAME AND PART NUMBER (产品名称及编号)

Product Name (品名)	Part Number (零件号)
Assembly (产品主体)	ST- USB -XXXX
Embossed Package (包装)	

3. RATINGS (额定值)

Ltem（项目）	Standard（标准）	
Rated Voltage(MAX.) （额定电压）	100 V	〔 AC(rms)/DC 〕
Rated Current(MAX.) （额定电流）	1.0 A	
Ambient temperature Range （工作温度范围）	-20° C~+65° C.	
Storage temperature Range （存储温度范围）	-30℃~+20℃	
Ambient humidity Range （湿度范围）	70%R.H.MAX*2	

4. FEATURE & DIMENSIONS (特征及尺寸)

4.1 PRODUCT DIMENSION 产品尺寸

These connectors shall have the dimensions as shown in customer drawing.

本产品的相关尺寸参见客户图面。

4.2 PCB/PANEL LAYOUT (印刷电路板布局)

The recommended PCB layout is shown in customer drawing.

本产品适用的 PCB layout 参见客户图面。

4.3 MATERIAL (材料)

The harmful material can follow the requirement of ROHS.

本产品使用的材料符合 RoHS 指令要求。

4.4 PACKAGING (包装)

Products shall be packaged according to requirements specified in purchase order for safe delivery.products required tray or carrier tape should meet the proper specification per purchase order. Connector container and the packaging specification is shown in customer drawing.

产品包装可依客户指定要求。本产品采用 (管装), 具体规格见客户图面。

4.5 MARKING (标识)

Manufacturer`s name industry recognized logo or customer approved marks.

标示制造商的名称, 或客户认可的相关标志。



SUNGTECH(DONGGUAN) ELECTRONIC CO.,LTD

PRODUCT SPECIFICATION

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4.6 TRANSPORTATION (运输)

Any vehicle can be adopted for the transportation, but moisture-proof and no mechanical damage.

可采用任何运输工具运输，勿淋湿及机械性损伤。

4.7 STORAGE (存贮)

Temperature: $-30^{\circ}\text{C} \sim +20^{\circ}\text{C}$, Relative humidity: $\leq 70\%$, Not to storage in corrosive environments. Are-qualification test shall be conducted immediately while the storage duration exceed 6 months.

温度: $-30^{\circ}\text{C} \sim +20^{\circ}\text{C}$, 相对湿度: $\leq 70\%$; 勿贮存于腐蚀环境内。贮存期超过 6 个月后需重新进行品质确认。

5. PERFORMANCE (性能)

5.1 Electrical (电气性要求)

ITEM (条款)	DESCRIPTION (测试项目)	TEST CONDITIN (测试条件)	REQUIREMENT (必要条件)
5.1.1	Dielectric Withstanding Voltage Resistance 介质耐电压测试	Condition: EIA-364-20, 500V AC for, 1 minute. Test between adjacent contact of unmated samples. 条件: EIA-364-20, 以 500 伏特测试连接器相邻端子一分钟	Requirement: No creeping discharge or flashes occur. Current leakage 1mA Max. 要求: 漏电流最大不超过 1mA.
5.1.2	Contact Resistance 接触阻抗测试	Condition: EIA-364-23, except 100mA maximum test current and 20mV maximum open circuit voltage. 条件: EIA-364-23, 以最大 100mA 电流, 最大 20mV 电压环路测试产品.	Requirement: 30m Ω Max. 要求: 阻抗小于 30 毫欧
5.1.3	Isolation Resistance 绝缘阻抗	Condition: EIA-364-21, method C, 500V DC 条件: EIA-364-21, 方式 C, 电压为 500V 直流	Requirement: 100M Ω Min., final 100M Ω Max., initial 要求: 最小绝缘阻抗大于 100 毫欧



SUNGTECH(DONGGUAN) ELECTRONIC CO.,LTD

PRODUCT SPECIFICATION

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5.2 Mechanical (机械性能)

ITEM (条款)	DESCRIPTION (测试项目)	TEST CONDITIN (测试条件)	REQUIREMENT (必要条件)
5.2.1	Durability Cycling 插拔寿命测试	Condition: EIA-364-09, 5000 cycles time, mate and unmated connectors for 500 cycles per hour. 条件: EIA-364-09,在每小时 500 次插拔数次下可循环工作 5000 次。	Requirement: Automatic equipment: 200 要求: 自动测试机: 200 次/小时
5.2.2	Total Pulling and Insertion Force 产品插拔力	Condition: EIA-364-13, at a rate of 25 ± 3 mm/minute 条件: EIA-364-13,测试速度为 25 ± 3 mm/分钟	Requirement: Total Pulling Force: 10N Min. Total Insertion Force: 35N Max 要求: 拔出力: 至少 10N. 插入力: 最大 35. N
5.2.3	Terminal retention force 端子保持力	Apply axial pull out force at the rate of 25 ± 3 mm/minute on the terminal assembled in the housing 端子與 Housing 組裝后,以操作速度每分鐘位移 25 ± 3 MM, 將端子拔出 Housing,進行端子保持力測試	0.3kgf(3N)以上(per pin) 0.3kgf(3N)min 每 PIN 保持力在 0.3kgf 以上.

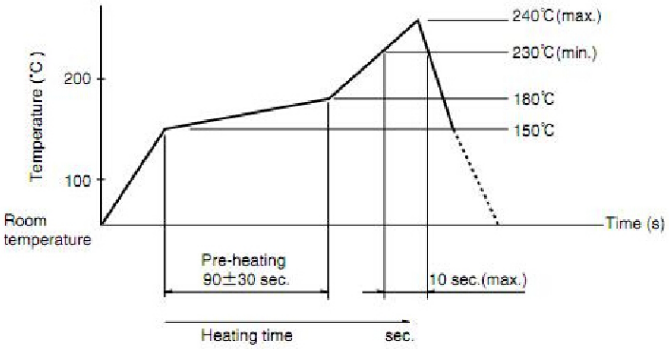


SUNGTECH(DONGGUAN) ELECTRONIC CO.,LTD

PRODUCT SPECIFICATION

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5.3 ENVIRONMENTAL (环境要求)

ITEM (条款)	DESCRIPTION (测试项目)	TEST CONDITIN (测试条件)	REQUIREMENT (必要条件)
5.3.1	Solderability 焊锡性能	Condition: EIA-364-52. Dip solder tails into the molten solder (held at $230 \pm 5^\circ\text{C}$) up to 0.5mm from the tip of tails for $3 \pm 0.5\text{sec}$. 条件: EIA-364-52.将产品的锡镀部分浸入 $230 \pm 5^\circ\text{C}$ 的锡炉里, 深度 0.5mm, 时间为 3 ± 0.5 秒.	Requirement:Solder coverage 95% Min. 要求: 需 95% 以上区域上锡方可.
5.3.2	Salt Spray 盐雾测试	Condition: MIL-STD-1344, Concentration $5 \pm 1\%$. Spray time 8 hours. Ambient temperature $35 \pm 5^\circ\text{C}$. 条件: MIL-STD-1344,将产品放置于 $5 \pm 1\%$ 的盐雾测试机中测试 8 小时, 环境温度要求在 $35 \pm 5^\circ\text{C}$	Requirement: No physical damage.Contact Resistance: 100 milliohms Max. 要求: 无生锈现象, 端子接触阻抗不超过 100 毫欧
5.3.3	Resistance to soldering heat 抗高温焊接性能	Condition: Touch the terminal with the soldering iron (held at $350 \pm 10^\circ\text{C}$) for $3 \pm 1\text{seconds}$. However,without too much pressure to the terminal. 条件: 用 $350 \pm 10^\circ\text{C}$ 的烙铁接触端子 2-4 秒, 不可用较大压力压端子	Requirement:No appearance damaged. 要求: 无外观不良
5.3.4	Drop 掉落实验	Condition: From 1.5m 条件: 将产品从 1.5m 空中自由落下	Requirement:No physical damage. 要求: 无物理损伤
5.3.5	RESISTANCE TO IR REFLOW 回流焊测试如图	 <p>The graph shows Temperature (°C) on the Y-axis (0 to 200+) and Time (s) on the X-axis. The profile starts at Room temperature, rises to a pre-heat plateau at approximately 150°C for 90±30 seconds. It then rises to a peak at 240°C (max.) and 230°C (min.), holds there for 10 seconds (max.), and finally cools down. The heating time is indicated as the duration from room temperature to the peak.</p>	Requirement: : No Damage after 2 times of reflow 要求: 经过两次回流焊, 产品无损伤