

YUEQING HONGYI ELECTRONICS CO., LTD  
乐清市宏一电子有限公司

SPECIFICATION FOR APPROVAL  
承认书

CUSTOMER 客户名称	
DESCRIPRION 产品名称	2503 沉板系列连接器
ITEM NO 编 号	HY-B25008 (B108)
DATE 日 期	2024-07-04

CUSTOMER ACKNOWLEDGEMENT SEAL

客户承认印签

(APPROVAL) 核准	(ENGINEERING) 工程	(PURCHASE) 采购	(QUALITY) 品质
承认结果: <input type="checkbox"/> 通过 <input type="checkbox"/> 不通过 <input type="checkbox"/> 重新送样			

IS09001

IS014001

IS045001

IATF16949 体系认证

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# 产 品 承 认 书 目 录

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# PRODUCT SPECIFICATION

## 产品规范

### 1、Scope

#### 适用范围

This specification includes the following specifications, including the specification of 2.50mm pitch 2503 sunk plate series connector

本规范包括下列此种规格包括 2.50mm 间距 2503 沉板系列连接器规格说明

### 2、Appearance and Dimension

#### 外观及尺寸

2.1 Appearance:Product surface without defect、dirt、crack、and mechanical damage,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

2.2 Dimension:According to drawings

外形尺寸：依照附图

### 3、Disposal of Material and surface

#### 材料与表面处理

P/N 零件名称	Type 类型	Material 材料	Finish 表面处理	Expiain 说明
Wafer 针座	Contact 插针	Phosphor bronze 磷铜厚0.20mm	Tin Plating:2.5~5 μm 镀锡：2.5~5 μm	RoHS
	Plastic 塑壳	LCP UL94V-0	Color: Beige 颜色：米色	

#### 4、Ratings and applicable wires

##### 额定等级

Item 项目	Standard 规格
Rated Voltage 额定电压	250V AC/DC
Rated Current 额定电流	1A AC/DC
Ambient temperature Range 使用温度范围	-25°C- +85°C
Applicable wire insulation 适用线径	AWG 24#

#### 5、Electrical Performance

##### 电气性能

N0. 序号	Ltem 项目	Test mode 试验方法	Requirement 技术要求
5.1	Contact Resistance 接触电阻	Male female cooperation, open voltage less than 20mV, current 100mA detection connector at both ends  公母配合, 开放电压20mV 以下, 电流100mA 检测连接器连接器两端	Initial: 20mΩ Max 初始: 20mΩ Max  After Test: 30mΩ Max 试验后: 30mΩ Max
5.2	Withstand voltage 耐电压	Mate connectors, apply 1000V AC for 1 minute between adjacent terminal or ground  公母配合, 在相邻端子, 端子与地片之间, 使用1000V 的交流电1分钟, 检测连接器	No Breakdown and Flashover  外观无损伤, 无打火花
5.3	Insulation Resistance 绝缘电阻	Mate connectors, apply 500V DC between adjacent terminal or ground  公母配合, 在相邻端子, 端子与地片之间, 使用500V 的直流电, 检测连接器	1000MΩ Min

## 6、机械性能

### Mechanical Performance

N0. 序号	Ltem 项目	Test mode 试验方法	Requirement 技术要求
6.1	Wire insertion force 导线插入力	Insert the wire or copper needle, speed per minute 25 + 3mm test  插入电线，速度为每分钟 25±3mm 进行测试	Per contact 单一接触点  20N Max
6.2	Wire pull-out force 导线拔出力	The wire is pulled out, the speed per minute 25 + 3mm test  拔出电线，速度为每分钟25±3mm进行测试	Per contact 单一接触点  15N Min

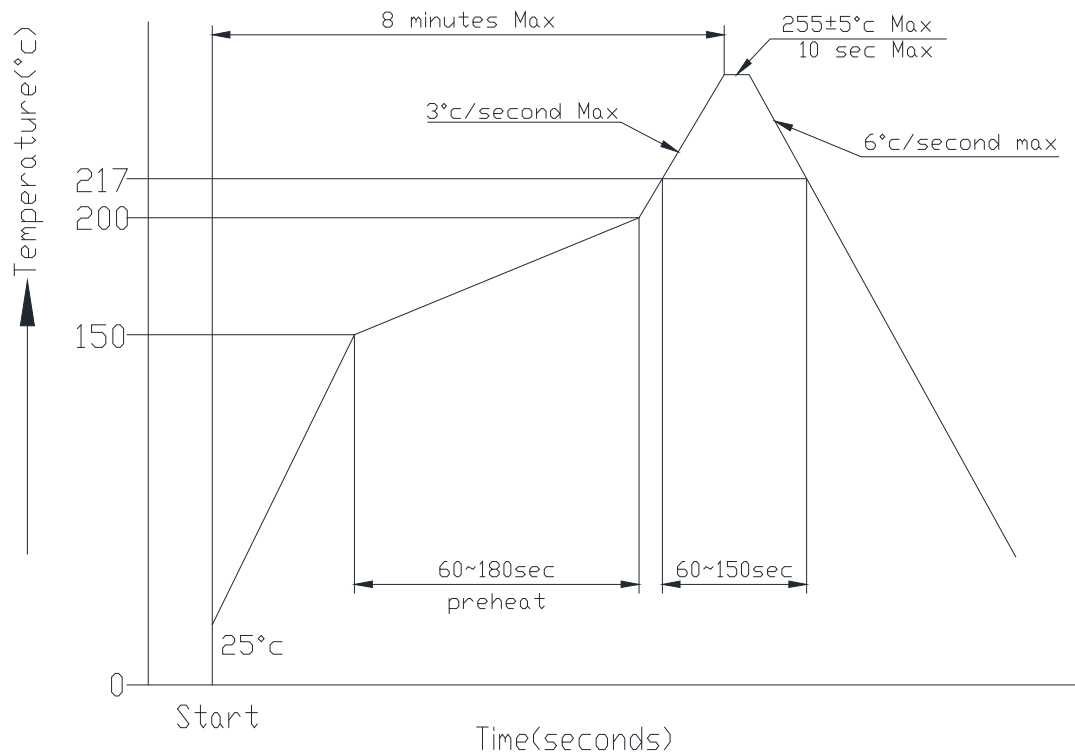
## 7、Endurance Characteristics:

### 环境性能

N0. 序号	Ltem 项目	Test mode 试验方法	Requirement 技术要求	
7.1	Heat Resistance 耐热性	85±2℃,96 hours	Appearance 外观	No damage 无异常
			Contact Resistance 接触电阻	30 mΩ Max
7.2	Cold Resistance 耐寒性	-25±3℃,96 hours	Appearance 外观	No damage 无异常
			Contact Resistance 接触电阻	30 mΩ Max
7.3	Humidity 耐湿性	Temperature: 60±2℃ Relative Humidity: 90~95% Duration: 96 hours  温度: 60±2℃ 湿度: 90~95%(RH) 持续时间: 96 hours	Appearance 外观	No damage 无异常
			Contact Resistance 接触电阻	30 mΩ Max
			Withstand Voltage 耐电压	No Breakdown and Flashover 外观无损伤, 无打火花
			Insulation Resistance 绝缘电阻	1000MΩ Min

NO. 序号	Ltem 项目	Test mode 试验方法	Requirement 技术要求	
7.4	温度变化 Temperature Cycling	5 cycles of: a) -25°C 30 minutes b) +130°C 30 minutes	Appearance 外观	No damage 无异常
		从-25°C持续30 分钟升至+130°C持续30 分钟, 循环5 次	Contact Resistance 接触电阻	30 mΩ Max
7.5	Salt spray 盐雾	24±1 hours exposure to a salt spray from the 5±1% solution at 35±2°C	Appearance 外观	No damage 无异常
		在温度35±2°C, 盐水浓度5±1%下, 盐水喷雾24±1 小时	Contact Resistance 接触电阻	30 mΩ Max
7.6	Solder ability 焊锡附着性	Soldering Time: 3-5sec solder Temperature: 245±5°C  焊接时间: 3-5 秒 焊接温度: 245±5°C	Solder Wetting 焊料润湿	Immersion area above 95%  浸渍面积 95% 以上
7.7	Solder- Resistance 焊锡耐热性	SMT reflow soldering heat resistance range: Soldering time:5~10sec solder. Temperature:255±5°C SMT 型回流焊接耐热范围: 焊接时间: 5~10 秒. 焊接温度: 255±5°C  Please refer to the 8 solder reflow temperature curve 回流焊请参考 8 温度曲线图	Appearance 外观	No damage 无异常

## 8、 SMT lead-free process temperature curve SMT 无铅工艺温度曲线



Notes: Please check the reflow soldering condition by your own devices beforehand. Because the condition changes by the soldering devices, P.C. boards, and so on

注记: 由于 P.C 板等焊接装置改变条件,所以请预先用自己的装置检查回流焊的条件

## 9、 Caution 注意事项

plastic because of characteristics with water after package is opened should avoid exposure to, the temperature is higher than 30 °C, humidity is higher than 60%RH in the environment, and in the 24 hours after all after use, to prevent subsequent reflow, wave soldering process to produce foaming phenomenon of deformation

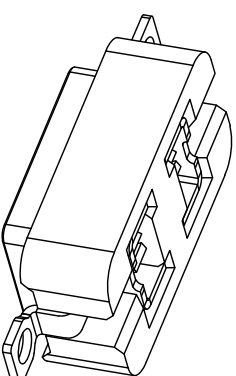
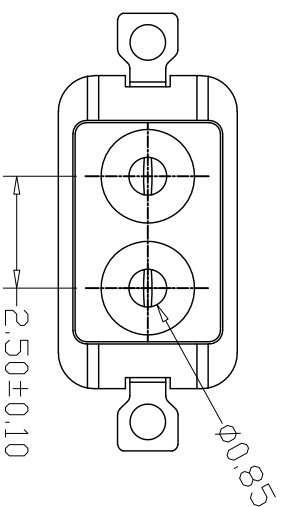
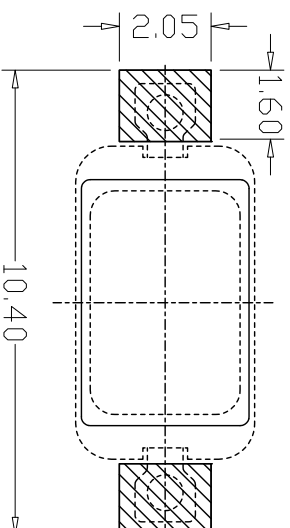
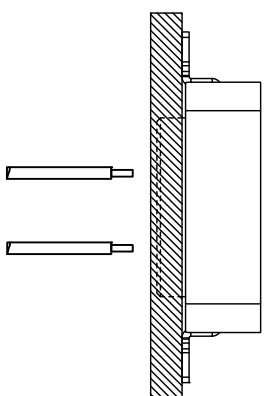
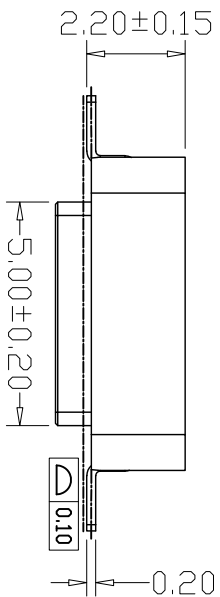
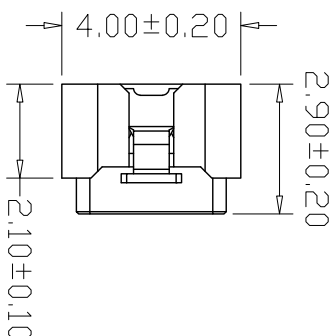
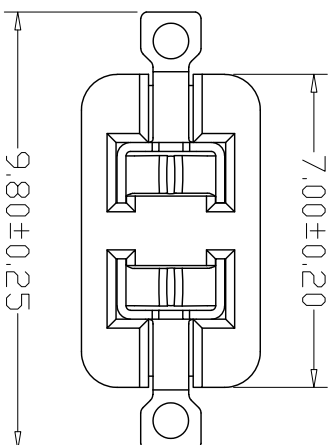
塑料因具有吸水之特性包装拆封后应避免暴露于, 温度高于 30°C, 湿度高于 60%RH 的环境中, 并在拆封后 24 小时内全数使用完毕, 防止后续回流焊、波峰焊制程产生起泡变形现象



版本 REV.	日期 DATE	ECN NO.	变更内容 DESCRIPTION	制图 DRAWN

### SPECIFICATIONS

- Current Rating: 1A AC, DC
  - Voltage Rating: 250V AC, DC
  - Temperature Range:  $-25^{\circ}\text{C} \sim +85^{\circ}\text{C}$
  - Contact Resistance:  $20\text{m}\Omega$  Max
  - Insulation Resistance:  $1000\text{M}\Omega$  Min
  - Withstanding Voltage: 1000V AC/minute
  - Material
- Wafer: LCP UL94V-0  
PIN: Phosphor Bronze Tin-plated



### PCB LAYOUT

GENERAL TOLERANCE		制图 Mapping	姚勇	料号 PART NO.	版本 REV.	A
X.±0.25	X.±2°	审核 Audit	2024. 07. 02	B25008-02AB	页次 SHEET	1/1
.X±0.20	.X±1°	核准 Approved	2024. 07. 03	250337 WAIVER SMT TYPE		
.XX±0.15	.XX±0.5°	单位 Units	张名	客户料号 CSTM. NO.		
.XXX±0.10	.XXX±0.5°	MM	2024. 07. 04	SCALE	1:1	

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