

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	电池座 2.0 直、卧插系列连接器
ITEM NO 编 号	HY-A20025 (A63-64)
DATE 日 期	2022-11-22

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 2.00mm pitch Battery holder series series connector  
本规范包括下列此种规格包括 2.00mm Pitch 电池座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 damang, Contactwithout 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

Specification 规格内容		Material 材质	Finish 表面处理	Environmental protection grade 环保等级
Wafer 针座 (直插)	Plastic 塑壳	PA46 UL94V-0	Color: Black 颜色: 黑色	RoHS2.0
	Contact 插针	Brass 黄铜 厚 0.30mm	Tin Plating:2.5~5 μm 镀锡: 2.5~5 μm	
Wafer 针座 (弯插)	Plastic 塑壳	PA46 UL94V-0	Color: Black 颜色: 黑色	
	Contact 插针	Brass 黄铜 厚 0.30mm	Tin Plating:2.5~5 μm 镀锡: 2.5~5 μm	

#### 4、Ratings and applicable wires

##### 额定等级

Item 项目	Standard 规格
Rated Voltage 额定电压	100V AC/DC
Rated Current 额定电流	2A AC/DC
Ambient temperature Range 使用温度范围	-25°C- +85°C

#### 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	ContactResistance 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:30mΩ Max 初始: 30mΩ Max  After Test: 40mΩ Max 试验后: 40mΩ Max
5.2	withstandvoltage 耐电压	Mate connectors, apply 800V 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800V 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	InsulationResistance 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
6.3	Pin Retention Force Pin 针保持力	Apply axial push force at the speed rate of 25.4±3mm/minute  以每分 25.4±3mm 的速率,将 PIN 针从 Wafer 内轴向拔出力	Per contact: 15N Min 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	Repeated Insertion/ Withdrawal 重复插拔	When mated up to 30 cycles repeatedly by the rate of 10 cycles per minute  以每分钟不超过 10 次的速率,将公母插拔 30 次	Contact Resistance 接触电阻	40 mΩ Max
7.2	Temperature Rise 温升测试	Mating connectors shall be energized at rating current until thermal stability is achieved, and then measured the temperature rise  公母连接器配合后,加载额定电流直到温度上升到稳定 状态,然后再测量温升	Temperature Rise 温升测试	30°C Max
7.3	Heat Resistance 耐热性	85±2°C,96 hours	Appearance 外观	No damage 无异常
			Contact Resistance 接触电阻	40 mΩ Max
7.4	Cold Resistance 耐寒性	-25±3°C,96 hours	Appearance 外观	No damage 无异常
			Contact Resistance 接触电阻	40 mΩ Max

## 7、Endurance Characteristics:

### 环境性能

NO. 序号	Ltem 项目	Test mode 试验方法	Requirement 技术要求	
7.5	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	40 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
7.6	温度变化 Temperature Cycling	5 cycles of: a) -25℃ 30 minutes b) +85℃ 30 minutes  从-25℃持续30 分钟升至+85℃持续30 分钟, 循环5 次	Appearance 外观	No damage 无异常
			Contact Resistance 接触电阻	40 mΩ Max
7.7	Salt spray 盐雾	24±1 hours exposure to a salt spray from the 5±1% solution at 35±2℃  在温度35±2℃, 盐水浓度5±1%下, 盐水 喷雾24±1 小时	Appearance 外观	No damage 无异常
			Contact Resistance 接触电阻	40 mΩ Max
7.8	Solderability 焊锡附着性	Soldering Time: 3-5sec solder Temperature: 245±5℃  焊接时间: 3-5 秒 焊接温度: 245±5℃	Solder Wetting 焊料润湿	95%of immersed area must show no voids,pin holes.  浸渍面积需 95% 以上

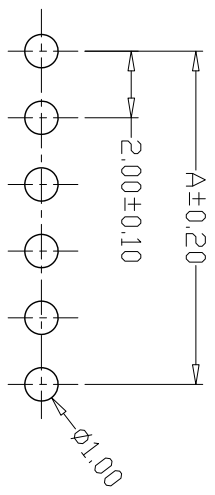
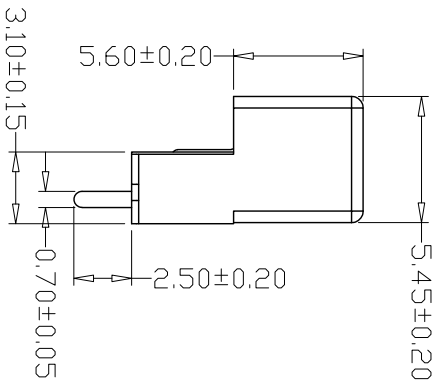
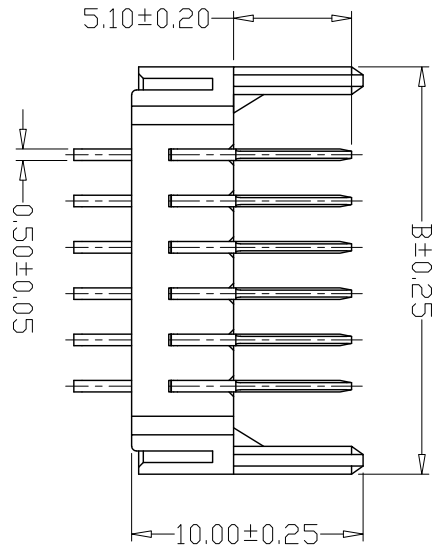
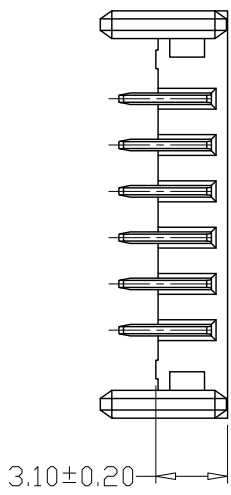
NO. 序号	Ltem 项目	Test mode 试验方法	Requirement 技术要求	
7.9	Solder- Resistance 焊锡耐热性	DIP type PA66 material welding heat resistance range: Soldering time:3~5sec solder. Temperature:230±5℃ DIP 型 PA66 材质焊接耐热范围: 焊接时间: 3~5 秒. 焊接温度: 230±5℃  DIP type PA46 material welding heat resistance range: Soldering time:3~5sec solder. Temperature:245±5℃ DIP 型 PA46 材质焊接耐热范围: 焊接时间: 3~5 秒. 焊接温度: 245±5℃	Appearance 外观	No damage 无异常



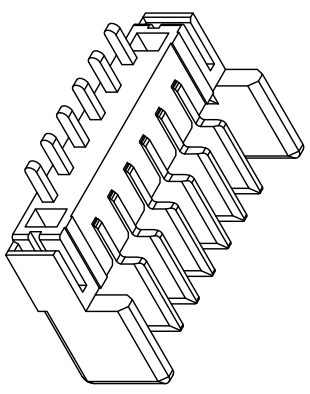
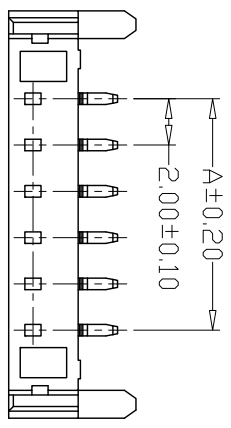
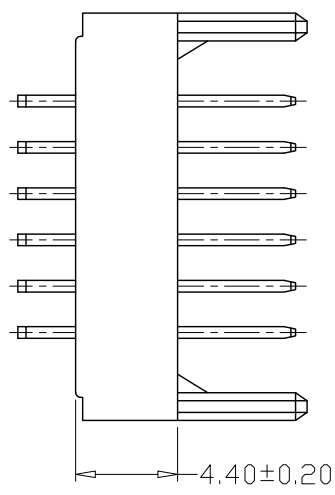
版本 REV.	日期 DATE	ECN NO.	变更内容 DESCRIPTION	制图 DRAWN

SPECIFICATIONS

- 1、Current Rating: 2A AC
- 2、Voltage Rating: 100V AC
- 3、Temperature Range: -25°C~+105°C
- 4、Contact Resistance: 30mΩ Max
- 5、Insulation Resistance: 1000MΩ Min
- 6、Withstanding Voltage: 800V AC/minute
- 7、Material  
Wafer: PA46 Back UL94V-0  
PIN: Barss Sn-plated



PCB LAYOUT



PIN	尺寸 (mm)	
	A	B
-02A	2.00	9.60
-03A	4.00	11.60
-04A	6.00	13.60
-05A	8.00	15.60
-06A	10.00	17.60
-07A	12.00	19.60
-08A	14.00	21.60
-09A	16.00	23.60
-10A	18.00	25.60
-11A	20.00	27.60
-12A	22.00	29.60

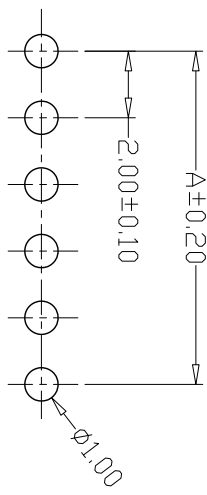
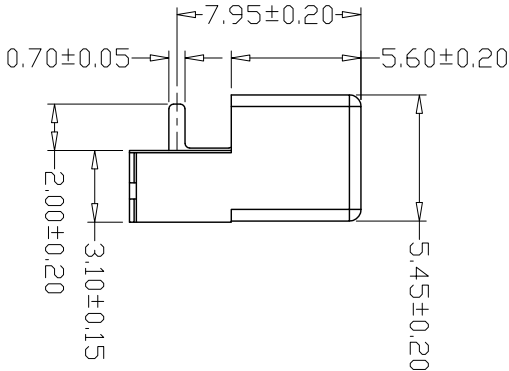
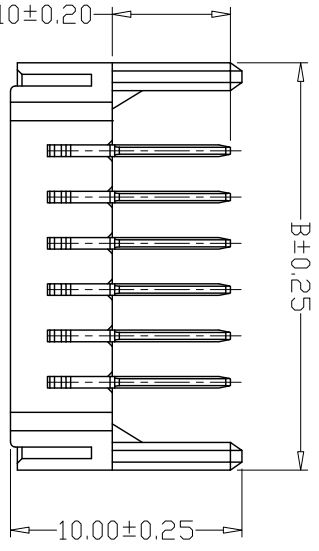
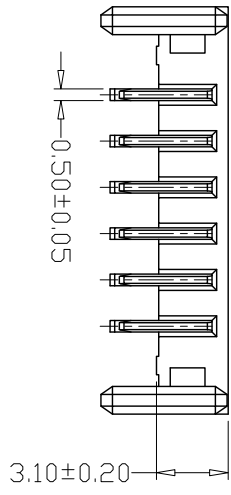
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X <sub>±0.25</sub>	X°±2°	审核 Audit	钱岳生	2022. 11. 20	品名 TITLE	2.0电池座直插 WAFER DIP TYPE	页次 SHEET	1/1
X <sub>±0.25</sub>	X°±1°	核准 Approved	张名	2022. 11. 21	客户料号 CSTM. NO.			
.XX±0.15	.XX°±0.5°	单位 Units	MM	SCALE	比例 SCALE	1:1		
.XXX±0.10	.XXX°±0.5°							

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YueQing HongYi Electronics Co., Ltd

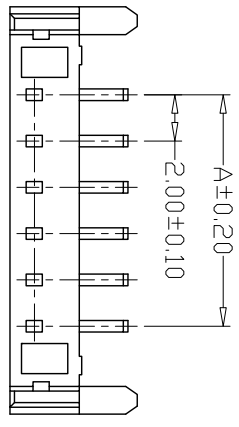
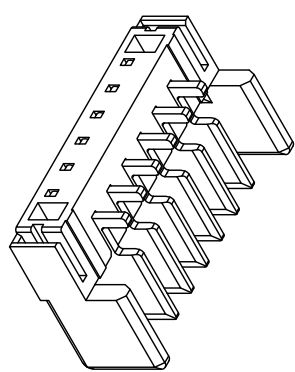
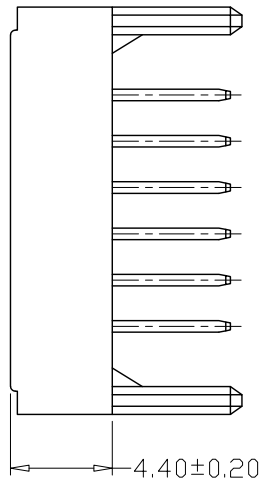
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Wafer: PA46 Back UL94V-0  
PIN: Barss Sn-plated



PCB LAYOUT



PIN	尺寸 (mm)	
	A	B
-02AW	2.00	9.60
-03AW	4.00	11.60
-04AW	6.00	13.60
-05AW	8.00	15.60
-06AW	10.00	17.60
-07AW	12.00	19.60
-08AW	14.00	21.60
-09AW	16.00	23.60
-10AW	18.00	25.60
-11AW	20.00	27.60
-12AW	22.00	29.60

GENERAL TOLERANCE		制图 Mapping	张迎春	料号 PART NO.	A20025-12AW	版本 REV.	A
X $\pm$ 0.25	X $\pm$ 2°	审核 Audit	钱岳生	品名 TITLE	2.0电池座插	页次 SHEET	1/1
X $\pm$ 0.25	X $\pm$ 1°	核准 Approved	张名	客户料号 CSTM. NO.			
.XX $\pm$ 0.15	.XX $\pm$ 0.5°	单位 Units	2022. 11. 21	比例 SCALE	1:1	<b>乐清市宏一电子有限公司</b> YueDing HongYi Electronics Co., Ltd	
.XXX $\pm$ 0.10	.XXX $\pm$ 0.5°						