

## SPECIFICATIONS

Current Rating: 1.0 Amps

Withstanding Voltage: AC 500V

Insulation Resistance: 1000M $\Omega$  MinContact Resistance:  $20\text{m}\Omega$  Max

Operation Temperature:  $-40^{\circ}$  to  $+105^{\circ}$

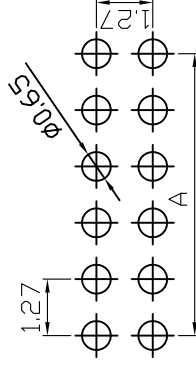
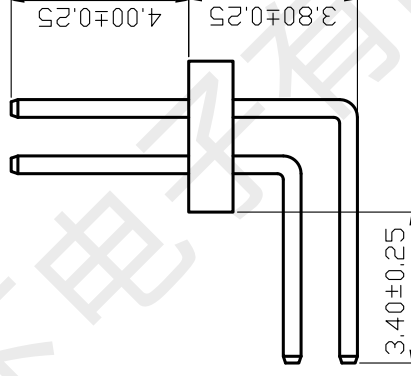
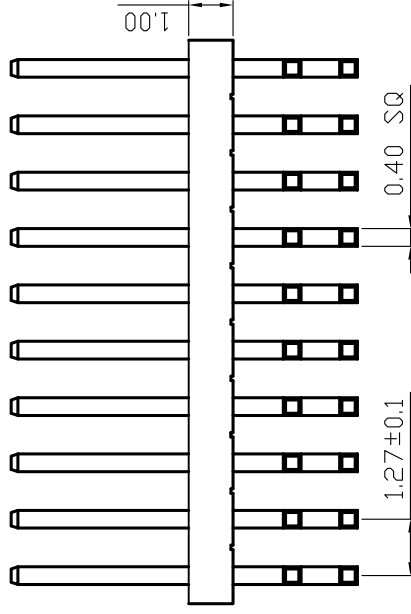
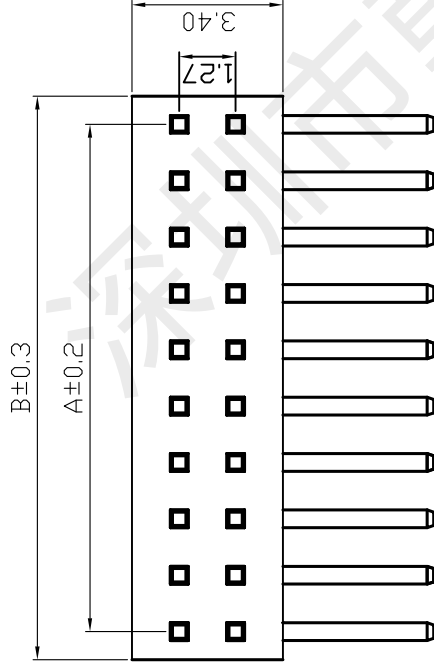
Insulator Material: Polyester (UL94V-0)

Brass

Standard:

Contact Plating: Gold Flash

Max. Processing Temp: 240° C for 30-60seconds  
(260° C for 5seconds)

RECOMMEND P.C.B LAYOUT  
PCB TOLERANCE: +0.05 (TOP VIEW)

|                                                                                                                                                                            |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| <div><div><div><div>韩下</div><div>HANXIA</div></div></div><div>深圳市韩下电子有限公司</div></div> |  |  |  |  |  |  |  |  |  |
| UNLESS OTHERWISE SPECIFIED TOLERANCE                                                                                                                                       |  |  |  |  |  |  |  |  |  |
| X : ±0.30 X° : ±5°                                                                                                                                                         |  |  |  |  |  |  |  |  |  |
| X, X : ±0.25 X, X° : ±1°                                                                                                                                                   |  |  |  |  |  |  |  |  |  |
| X, XX: ±0.20 X, XX° : ±0.5°                                                                                                                                                |  |  |  |  |  |  |  |  |  |
| DRAW : 黄彬 2022/04/24                                                                                                                                                       |  |  |  |  |  |  |  |  |  |
| CHECKED: 张伟 2022/04/24                                                                                                                                                     |  |  |  |  |  |  |  |  |  |
| APPROVED: 罗小春 2022/04/24                                                                                                                                                   |  |  |  |  |  |  |  |  |  |
| PROJECT NO. 1/1                                                                                                                                                            |  |  |  |  |  |  |  |  |  |
| PROJECT mm UNIT SCALE N:1                                                                                                                                                  |  |  |  |  |  |  |  |  |  |
| SIZE A4                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |
| REV A                                                                                                                                                                      |  |  |  |  |  |  |  |  |  |
| HX PZ1.27-2x9P WZ                                                                                                                                                          |  |  |  |  |  |  |  |  |  |
| DRAWING NAME:                                                                                                                                                              |  |  |  |  |  |  |  |  |  |
| DIM. A DIM. B No. of DIM. A DIM. B No. of DIM. A DIM. B No. of                                                                                                             |  |  |  |  |  |  |  |  |  |
| 1 — — 11 12.70 13.97 21 25.40 26.67 31 38.10 39.37 41 50.80 52.07                                                                                                          |  |  |  |  |  |  |  |  |  |
| 2 1.27 2.54 12 13.97 15.24 22 26.67 27.94 32 39.37 40.64 42 52.07 53.34                                                                                                    |  |  |  |  |  |  |  |  |  |
| 3 2.54 3.81 13 15.24 16.51 23 27.94 29.21 33 40.64 41.91 43 53.34 54.61                                                                                                    |  |  |  |  |  |  |  |  |  |
| 4 3.81 5.08 14 16.51 17.78 24 29.21 30.48 34 41.91 43.18 44 54.61 55.88                                                                                                    |  |  |  |  |  |  |  |  |  |
| 5 5.08 6.35 15 17.78 19.05 25 30.48 31.75 35 43.18 44.45 45 55.88 57.15                                                                                                    |  |  |  |  |  |  |  |  |  |
| 6 6.35 7.62 16 19.05 20.32 26 31.75 33.02 36 44.45 45.72 46 57.15 58.42                                                                                                    |  |  |  |  |  |  |  |  |  |
| 7 7.62 8.89 17 20.32 21.59 27 33.02 34.29 37 45.72 46.99 47 58.42 59.69                                                                                                    |  |  |  |  |  |  |  |  |  |
| 8 8.89 10.16 18 21.59 22.86 28 34.29 35.56 38 46.99 48.26 48 59.69 60.96                                                                                                   |  |  |  |  |  |  |  |  |  |
| 9 10.16 11.43 19 22.86 24.13 29 35.56 36.83 39 48.26 49.53 49 60.96 62.23                                                                                                  |  |  |  |  |  |  |  |  |  |
| 10 11.43 12.70 20 24.13 25.40 30 36.83 38.10 40 49.53 50.80 50 62.23 63.50                                                                                                 |  |  |  |  |  |  |  |  |  |



深圳市韩下电子有限公司

Shenzhen Hanxia Electronic Co., Ltd

Tel: 0755-33819206 Fax: 0755-27597491

## 承 认 书

### SPECIFICATION FOR APPROVAL

客 户 Customer:

产品名称 Project:

排针

规格型号 Part No:

HX PZ1.27-2x9P WZ

#### 贵公司承认印 Approval signatures

| 料 号/Part No. | 签 章/Signatures |
|--------------|----------------|
|              |                |

日期 Date:

|             |     |                                                                                      |
|-------------|-----|--------------------------------------------------------------------------------------|
| 拟制/Drawn    | 黄彬  |  |
| 审核/Check    | 张伟  |                                                                                      |
| 批准/Approved | 罗小春 |                                                                                      |

**1、SCOPE:** (适用范围)**1.1** This specification covers production and inspection of Connector.

本规范内容适用于本公司普通系列型条形连接器（针座）产品的生产与检验.

**2、USE CONDITION:** (使用条件)**2.1 Ambient temperature Range:-40℃~+105℃**

环境温度：-40℃~+105℃

**2.2 Applicable Wire Sizes:AWG#28~#32**

适用线规： AWG#28~#32

**2.3 Applicable PC board thickness:1.2~1.6mm**

适用 PC 板厚度： 1.2~1.6 mm

**3、Appearance and Dimension:** (外观及尺寸)**3.1 Appearance:Product surface without defect、dirt、crack、and mechanical damang, 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.

**3.2 Dimension:According to drawings**

外形尺寸：依照附图

**3.3 Exchangable:Exchangable with same specification products.**

互换性：相同规格应能互换

**4、Material:**

材 料 (以图纸为准)

| P/N<br>零件名称                   | Type<br>类 型        | Material<br>材 料                  | Finish<br>表面处理                          | Expiain<br>说 明     |
|-------------------------------|--------------------|----------------------------------|-----------------------------------------|--------------------|
| Terminal<br>端子                | Contact<br>插 簧     | Phosphor bronze<br>锡青磷铜 厚 0.15mm | Tin Plating:3~4 μ m<br>镀锡: 3~4 μ m      | RoHS<br>Comp liant |
| Housing<br>孔 座                | Plastic<br>塑 壳     | Nylon66 UL94V-0                  | Color:White<br>颜色: 白色                   |                    |
| Opening Wafer<br>开口针座         | Contact<br>插 针     | Phosphor bronze<br>锡青磷铜 厚 0.30mm | Tin Plating:3~4 μ m<br>镀锡: 3~4 μ m      |                    |
|                               | Plastic<br>塑 壳     | Nylon46 UL94V-0                  | Color: Beige<br>颜色: 米色                  |                    |
| Lips Wafer<br>闭口针座            | Contact<br>插 针     | Phosphor bronze<br>锡青磷铜 厚 0.30mm | Gold Plating:3~4 μ " m<br>镀金: 3~4 μ " m |                    |
|                               | Plastic<br>塑 壳     | PBT UL94V-0                      | Color: White<br>颜色: 白色                  |                    |
| Tiepian Wafer<br>卧贴针座<br>立贴针座 | Contact<br>插 针     | Phosphor bronze<br>锡青磷铜 厚 0.30mm | Tin Plating:3~4 μ m<br>镀锡: 3~4 μ m      |                    |
|                               | Solder tabs<br>焊护耳 | Phosphor bronze<br>锡青磷铜 厚 0.25mm | Tin Plating:3~4 μ m<br>镀锡: 3~4 μ m      |                    |
|                               | Plastic<br>塑 壳     | Nylon46 UL94V-0                  | Color: Beige<br>颜色: 米色                  |                    |

**5、Electrical Performance:**

## 电 气 性 能

| N0.<br>序号 | Ltem<br>项 目                   | Requirement<br>技术要求   |
|-----------|-------------------------------|-----------------------|
| 5.1       | Voltage Rated<br>额定电压         | 50V AC DC             |
| 5.2       | Current Rated<br>额定电流         | 1A AC DC              |
| 5.3       | Contact Resistance<br>接触电阻    | $\leq 0.02 \Omega$    |
| 5.4       | Insulation Resistance<br>绝缘电阻 | $\geq 1000 M\Omega$   |
| 5.5       | Dielectric Strength<br>耐 压    | $\geq 500V$ AC/minute |

**6、Mechanical Performance:**

## 机 械 性 能

| N0.<br>序号 | Ltem<br>项 目                              | Requirement<br>技术要求 |
|-----------|------------------------------------------|---------------------|
| 6.1       | Male contact Retention force<br>PIN 针固定力 | $\geq 10N$ per pin  |
| 6.2       | Female contact Retention force<br>端子固定力  | $\geq 10N$ per pin  |
| 6.3       | Plug-in force<br>插入力                     | $\leq 3N$ per pin   |
| 6.4       | Plug-out force<br>拔出力                    | $\geq 0.5N$ per pin |

**7、Endurance Characteristics:**

## 环 境 性 能

| N0.<br>序号 | Ltem<br>项 目           | Requirement<br>技术要求                                                                                                                                                      |
|-----------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7.1       | Soldering rest<br>可焊性 | Time: $2.5 \pm 0.5S$<br>时间: $2.5 \pm 0.5S$<br><br>Temperature: $260 \pm 5^\circ C$<br>温度: $260 \pm 5^\circ C$<br><br>Area of Soldering: $\geq 95\%$<br>焊锡面积: $\geq 95\%$ |

|     |                                      |                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7.2 | Resistance to soldering Heat<br>耐焊接热 | Time: $5 \pm 1\text{S}$<br>时间: $5 \pm 1\text{S}$<br><br>Temperature: $260 \pm 5^\circ\text{C}$<br>温度: $260 \pm 5^\circ\text{C}$<br><br>Appearance: NO Damage<br>外观: 无损坏                                                                                                                                                                                                                                 |
| 7.3 | Heat test<br>耐热性                     | Time: 96h<br>时间: 96 小时<br><br>Temperature: $+85 \pm 3^\circ\text{C}$<br>温度: $+85 \pm 3^\circ\text{C}$<br><br>Appearance: NO Damage<br>外观: 无损坏<br><br>Contact resistance: $\leq 20\text{ m}\Omega$<br>接触电阻: $\leq 20\text{ m}\Omega$                                                                                                                                                                     |
| 7.4 | Cold test<br>耐冷性                     | Time: 48h<br>时间: 48 小时<br><br>Temperature: $-25 \pm 3^\circ\text{C}$<br>温度: $-25 \pm 3^\circ\text{C}$<br><br>Appearance: NO Damage<br>外观: 无损坏<br><br>Contact resistance: $\leq 20\text{ m}\Omega$<br>接触电阻: $\leq 20\text{ m}\Omega$                                                                                                                                                                     |
| 7.5 | Temperature Cycling<br>温度循环          | Low temperature: $-25 \pm 3^\circ\text{C}$<br>低温: $-25 \pm 3^\circ\text{C}$<br><br>High temperature: $85 \pm 3^\circ\text{C}$<br>高温: $85 \pm 3^\circ\text{C}$<br><br>For 5 cycles. test after keeping in Normal Condition for 30 min.<br><br>5 次循环后, 放置在正常环境中 30 分钟, 进行测试<br><br>Appearance: NO Damage<br>外观: 无损坏<br><br>Contact resistance: $\leq 20\text{ m}\Omega$<br>接触电阻: $\leq 20\text{ m}\Omega$ |

|     |                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7.6 | Invariablenes humidity<br>恒定湿热 | <p>Temperature: <math>60 \pm 2^{\circ}\text{C}</math><br/>温度: <math>60 \pm 2^{\circ}\text{C}</math></p> <p>Relative humidity: 90%-96% RH<br/>相对湿度: 90%-96% RH</p> <p>Tim: 96h<br/>时间: 96 小时<br/>Appearance: NO Damage<br/>外观: 无损坏</p> <p>Contact resistance: <math>\leq 20\text{ m}\Omega</math><br/>接触电阻: <math>\leq 20\text{ m}\Omega</math></p> <p>Insulation Resistance: <math>\geq 100\text{ M}\Omega</math><br/>绝缘电阻: <math>\geq 100\text{ M}\Omega</math></p>                                                                                                                                                                  |
| 7.7 | Salt Spray<br>盐雾试验             | <p>Salt concentration: <math>5 \pm 1\%</math><br/>浓度: <math>5 \pm 1\%</math></p> <p>Temperature: <math>35 \pm 2^{\circ}\text{C}</math><br/>温度: <math>35 \pm 2^{\circ}\text{C}</math></p> <p>Tim: <math>16 \pm 2\text{ h}</math><br/>时间: <math>16 \pm 2</math> 小时</p> <p>After salt is removed by running wafer and A drop is removed ,it is measured.</p> <p>把试验样品从试验箱顶悬挂下来, 采用浓度(<math>5 \pm 1</math>) %的氯化钠溶液, 连续雾化 16 小时, 试验后用流动的蒸馏水轻轻洗去表面沉积物, 在常温常驻湿条件下恢复 1-2 小时, 外观无损伤</p> <p>Appearance: NO Damage<br/>外观: 无损坏</p> <p>Contact resistance: <math>\leq 20\text{ m}\Omega</math><br/>接触电阻: <math>\leq 20\text{ m}\Omega</math></p> |



## 8、Packaging Transportation Storage

包装、运输、贮存

### 8.1 Packaging

包装

- (1) **The packing of plastic inner is the plastic bag,the packing of inner terminal is panel mounting attach material packing, marked with product name, specification model, quantity, date in produced.**

塑件内包装为塑料袋， 端子内包装为盘装带料包装， 装（贴）入合格证， 注明产品名称、规格型号、数量生产日期

- (2) **Exterior package is carton, facing the packing list, the packing list marked with product name, specificcation model, quantity, date of dispatch.**

外包装为纸箱，贴装箱单、装箱单上注明产品名称、规格型号、数量、出货日期

- (3) **The product in the box must not rock.**

产品在箱内不晃动

### 8.2 Transportation

运输

**Allow for any way transportation, can't get wet and mechanical in jury.**

允许用任何方式运输，勿淋湿及机械性损伤

### 8.3 Storage

贮存

**The connector of packing finished should be in the ambient temperature between-10℃ to+40℃, Relative humidity≤80%. To store in storehouse does not have acidic, alkaline air and other corrosive gas in the ambient air.**

包装完毕的连接器应在环境温度为-10℃~+40℃, 相对湿度≤80%，周围空气中没有酸性，碱性及其它腐蚀性气体的库房中贮存