| Product Specification [产品规格书]:                   | ISSUED BY:   | Engineering Dept |
|--|--------------|------------------|
| Subject [主题]:                                    | Date Issued  | 2013/03/15       |
| 1.27mm Pitch 1273 Series Connector Specification | Date Revised | 2013/07/30       |

This specification is referred to the 1.27mm series wire to board connector

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## 【1.适用范围 Scope】

此种规格包括 1.27mm Pitch 1273 Series 连接器规格说明.

This Specification Covers the 1.27mm Pitch 1273 Series Connector Specification.

#### 【2.规格与料号 Spec and Part number】

| 规格内容<br>Specification | 产品料号<br>Production No.               | 产品图示<br>Picture of Product |
|-----------------------|--------------------------------------|----------------------------|
| 胶壳/Housing            | 1273HI-2*XXX-PT                      | NONE                       |
| 针座/Wafer              | 1273WV-2*XX-6TSW<br>1273WR-2*XX-6TSW | NONE                       |

【3.材质与表面处理 Disposal of Material and surface】

| 规格内容<br>Specification |      | 材质<br>Materials    | 表面处理<br>Disposal of Surface        |
|-----------------------|------|--------------------|------------------------------------|
|                       | 端子   | 磷铜/Phosphor Bronze | Tin-Plated 70μ"; Nickel: Over 30μ" |
| 胶壳/Housing            | 塑胶   | PBT                | UL 94V-0                           |
| 生                     | Base | High Temp Plastic  | UL 94V-0                           |
| 针座/Wafer              | PIN  | 黄铜/Brass           | Tin-Plated 70μ"; Nickel: Over 30μ" |

(上述参数请以工程图为准/Please Refer to the Project drawing for the above Specification)

## 【4. 额定等级 Ratings and applicable wires】

| 项 目【Item】                                   | 规 格【Standard】 |                                |  |
|---|---------------|--------------------------------|--|
| 额定电压 Rated Voltage (Max.)                   | 250V          | [AC/DC]                        |  |
| 额定电流 Rated Current (Max.)                   | 1.2A          | [AC/DC]                        |  |
| 使用温度范围 Ambient temperature Range -40℃~+105℃ |               | ~+105°C                        |  |
| 适用线径 Applicable wire insulation O.D         |               | able 26~28#<br>D. 1.00mm(Max.) |  |

【 \*升温时含端子.Including terminal temperature rise. 】



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#### 【5.性能 PERFORMANCE】

## 5-1. 电气的性能 Electrical Performance.

| 项 目<br>【Item】 |                                  | 条 件<br>【Test Condition】  | 规 格<br>【Requirement】                                     |
|---------------|----------------------------------|--|--|
| 5-1-1         | 接触阻抗<br>Contact<br>Resistance    | 公母配合,开放电压 20mV 以下,电流 10mA 检测连接器 A~B 区. Mate connectors, measure by dry circuit, 20mV MAX, 10mA. (Based upon EIA-364-06A).  | Initial: 15 milliohms Max. After Test: 30 milliohms Max. |
| 5-1-2         | 绝缘阻抗<br>Insulation<br>Resistance | 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. Mate connectors, apply 500V DC between adjacent terminal or ground. (Based upon EIA-364-21B / MIL-STD-202 Method 302 Cond.B)          | 1000 Megohms Min.  |
| 5-1-3         | 耐电压<br>Dielectric<br>Strength    | 公母配合,在相邻端子,端子与地片之间,使用750V的交流电1分锺,检测连接器. Mate connectors, apply 750V AC for 1 minute between adjacent terminal or ground. (Based upon EIA-364-20A / MIL-STD-202 Method 301) | 不出现中断等情况<br>No Breakdown<br>and Flashover                |



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### 5-2. 机械的性能 Mechanical Performance.

|       | 项 目<br>【Item】                            | 条 件<br>【Test Condition】  | 规 格<br>【Requirement】   |
|-------|--|--|--|
| 5-2-1 | 插拔力<br>Insertion<br>& Retention<br>Force | 以每分锺 25.4±3mm 的速率插入和拔出. Insert and withdraw Connectors at the speed rate of 25.4±3mm/minute.       | Mating Force:<br>0.17kgf/ Max./Per PIN<br>Unmating Force:<br>0.03 Kgf/ Min Per PIN |
| 5-2-2 | Pin<br>针保持力<br>Pin Retention<br>Force    | 以每分 25.4±3mm 的速率,将 PIN 针从Wafer 内轴向拔出的力Apply axial push force at the speed rate of 25.4±3mm/minute. |  |

#### 5-3. 环境性能及其它 Environmental Performance and Others.

| 项 目    |  | 条 件   | 规               | 格                    |
|--------|--|---|-----------------|----------------------|
| 【Item】 |  | 【Test Condition】  | 【Require        | ement】               |
| 5-3-1  | 重复插拔<br>Repeated<br>Insertion/<br>Withdrawal | 以每分锺不超过 10 次的速率,将公母插拔30 次.<br>When mated up to 30 cycles repeatedly<br>by the rate of 10 cycles per minute. | 接触阻抗<br>Contact | 30 milliohms<br>Max. |



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| 项 目<br>【Item】 |                    | 条 件<br>【Test Condition】  | 规<br>【Require                    | 格<br>ement 】            |
|---------------|--------------------|--|----------------------------------|-------------------------|
|               |                    | 振幅: 1.5mm P-P<br>时间: 10~55~10 HZ in 1 minute   | 外观<br>Appearance                 | 无异状<br>No Damage        |
| 5-3-3         | 耐振动性<br>Vibration  | 持续时间: 每轴向 2 小时<br>Amplitude: 1.5mm P-P<br>Sweep time: 10~55~10 HZ in 1 minute<br>Duration: 2 hours in each X.Y.Z axials. | 接触阻抗<br>Contact<br>Resistance    | 30 milliohms<br>Max.    |
|               |                    | (Based upon EIA-364-28B/MIL-STD-202<br>Method 213B Cond.A)   | 瞬断<br>Discontinuity              | 1 micro-<br>second Max. |
|               |                    | 在 X.Y.Z 上 6 个方向上,以 490m/s <sup>2</sup> (50g 的  | 外观<br>Appearance                 | 无异状<br>No Damage        |
| 5-3-4         | 耐冲击性<br>Shock      | 力量)冲击下各 3 回.490m/s <sup>2</sup> {50G}, 3 strokes in each X.Y.Z. axes.  | 接触阻抗<br>Contact<br>Resistance    | 30 milliohms<br>Max.    |
|               |                    | (Based upon EIA-364-27B/MIL-STD-202<br>Method 213B Cond.A)   | 瞬断<br>Discontinuity              | 1 micro-<br>second Max. |
|               | 耐热性                | 85±2°C,96 hours.   | 外观<br>Appearance                 | 无异状<br>No Damage        |
| 5-3-5         | Heat<br>Resistance | (Based upon MIL-STD-202 Method 108A Cond.A)  | 接触阻抗<br>Contact<br>Resistance    | 30 milliohms<br>Max.    |
|               |                    |  | 外观                               | 无异状                     |
|               | 耐寒性                | -25±5°C,96 hours.  | Appearance                       | No Damage               |
| 5-3-6         | Cold<br>Resistance | ( Based upon EIA-364-105)  | 接触阻抗<br>Contact<br>Resistance    | 30 milliohms<br>Max.    |
|               |                    | 温度: 40±2℃  | 外观<br>Appearance                 | 无异状<br>No Damage        |
|               |                    | 湿度: 90~95%(RH)<br>持续时间: 96 hours   | 接触阻抗<br>Contact<br>Resistance    | 30 milliohms<br>Max.    |
| 5-3-7         | 耐湿性<br>Humidity    | Temperature: 40±2°C Relative Humidity: 90~95%  | 耐电压<br>Dielectric<br>Strength    | Must meet<br>5-1-3      |
|               |                    | Duration: 96 hours (Based upon EIA-364-31A/MIL-STD-202 Method 103B Cond.B)   | 绝缘阻抗<br>Insulation<br>Resistance | 500 Megohms<br>Min.     |



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| 项 目<br>【Item】 |                                | 条 件<br>【Test Condition】  | 规 格<br>【Requirement】          |   |
|---------------|--------------------------------|--|-------------------------------|---|
| 5-3-8         | 温度变化<br>Temperature<br>Cycling | 从-55°C持续 30 分锺升至+85°C持续 30 分锺,<br>循环 5 次.<br>5 cycles of: a) -55°C 30 minutes.<br>b) +85°C 30 minutes.<br>(Based upon EIA-364-32B)                               | 外观<br>Appearance              | 无异状<br>No Damage  |
|               |                                |  | 接触阻抗<br>Contact<br>Resistance | 30 milliohms<br>Max.  |
| 5-3-9         | 盐水喷雾<br>Salt Spray             | 在温度 35±2℃,盐水浓度 5±1%下,盐水喷雾 24±1 小时. 24±1 hours exposure to a salt spray from the 5±1% solution at 35±2℃. (Based upon EIA-364-26A/MIL-STD-202 Method 101D Cond.B). | 外观<br>Appearance              | 无异状<br>No Damage  |
|               |                                |  | 接触阻抗<br>Contact<br>Resistance | 30 milliohms<br>Max.  |
| 5-3-10        | 焊锡附着性<br>Solder-<br>ability    | 焊接时间: 3±0.5 秒.<br>焊接温度: 245±5℃.<br>Soldering Time: 3±0.5second.<br>Solder Temperature: 245±5℃.<br>(Based upon EIA-364-52)  | Solder Wetting                | 浸渍面积需 95%<br>以上<br>95% of<br>immersed area<br>must show no<br>voids, pin holes. |
| 5-3-11        | 焊锡耐热性<br>Solder-<br>Resistance | 焊接时间: 3~5 秒.<br>焊接温度: 255+5/-5°C.<br>Soldering time:3~5 sec solder.<br>Temperature:255+5/-5°C.<br>(Based upon EIA-364-56A)                                       | 外观<br>Appearance              | 无异状<br>No Damage  |