



东莞市思索连接器有限公司

SWB Connectors Co., Ltd

Tel.: +86-769-85420488/588/688 Fax: +86-0769-85420988 Web.: [www.SWB.tw](http://www.SWB.tw)

Add.: 广东省东莞市长安镇上角社区上南路 1 号`

#1 Shangnan Road, Shangjiao Precinct, Changan Town, Dongguan, Guangdong, 523878 CN



|                                                                   |              |            |
|-------------------------------------------------------------------|--------------|------------|
| Product Specification [产品规格书]:                                    | Document No  | PS-3025-07 |
| Subject [主题]:<br>3.00mm Pitch 3025 Series Connector Specification | Date Issued  | 2012/09/08 |
|                                                                   | Date Revised | 2020/03/12 |
|                                                                   | Version      | B          |

This specification is referred to the 3.00mm series wire to board connector

## 索引【INDEX】

1. 适用范围【Scope】
2. 规格与料号【Spec and Part number】
3. 材质与表面处理【Disposal of Material and surface】
4. 额定等级【Ratings and applicable wires】
5. 性能【Performance】
  - 5-1. 电气的性能【Electrical Performance.】
  - 5-2. 机械的性能【Mechanical Performance】
  - 5-3. 环境性能及其它【Environmental Performance and Others】
6. 综合插入力及拔出力【Insertion/Withdrawal Force】



东莞市思索连接器有限公司

SWB Connectors Co., Ltd

Tel.: +86-769-85420488/588/688 Fax: +86-0769-85420988 Web.: [www.SWB.tw](http://www.SWB.tw)

Add.: 广东省东莞市长安镇上角社区上南路 1 号`

#1Shangnan Road, Shangjiao Precinct, Changan Town, Dongguan, Guangdong, 523878 CN



|                                                                   |              |            |
|-------------------------------------------------------------------|--------------|------------|
| Product Specification [产品规格书]:                                    | Document No  | PS-3025-07 |
| Subject [主题]:<br>3.00mm Pitch 3025 Series Connector Specification | Date Issued  | 2012/09/08 |
|                                                                   | Date Revised | 2020/03/12 |
|                                                                   | Version      | B          |

### 【1. 适用范围 Scope】

此种规格包括 3.00mm Pitch 3025 Series 连接器规格说明.

This Specification Covers the 3.00mm Pitch 3025 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.                                                         |
|-----------------------|--------------------------------------------------------------------------------|
| 端子/Terminal           | 3025TF-PXXX-V                                                                  |
| 胶壳/Housing            | 3025HM-XX-XX<br>3025HM-2*XX-XXXX                                               |
| 针座/Wafer              | 3025WV-XXXX-XXXX<br>3025WR-XXXX-XXXX<br>3025WV-2*XXX-XXXX<br>3025WR-2*XXX-XXXX |

### 【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/Terminal           | 磷铜 (C5191)/Phosphor Bronze  | 1、Nickel Plated: 50u" Min ,Tin Plated: 100u" Min<br>2、Contact area 30u"Au Plated、 Over 20u" Nickel.                                     |
| 胶壳/Housing            | PA66                        | UL 94V-2/UL94V-0                                                                                                                        |
| 针座/Wafer              | Base<br>LCP                 | UL 94V-2/UL94V-0                                                                                                                        |
|                       | PIN<br>黄铜 (C2680/H65)/Brass | 1、Nickel Plated: 50u" Min ,Tin Plated: 100u" Min<br>2、Contact area 30u" Au Plated; Solder area Over Tin 100u" Plated ; Over 50u" Nickel |

(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                                     |                                     |
| 额定电流 Rated Current (Max.)                                | 5A                                       |                                     |
| 使用温度范围 Ambient temperature Range                         | -40℃~+105℃                               |                                     |
| 适用线径 Applicable wire insulation<br>AWG(mm <sup>2</sup> ) | AWG#20~22<br>(0.50~0.35mm <sup>2</sup> ) | Insulation 绝缘 O.D.<br>1.85mm (Max.) |

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



东莞市思索连接器有限公司

SWB Connectors Co., Ltd

Tel.: +86-769-85420488/588/688 Fax: +86-0769-85420988 Web.: [www.SWB.tw](http://www.SWB.tw)

Add.: 广东省东莞市长安镇上角社区上南路 1 号`

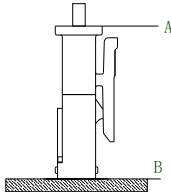
#1Shangnan Road, Shangjiao Precinct, Changan Town, Dongguan, Guangdong, 523878 CN



|                                                                   |              |            |
|-------------------------------------------------------------------|--------------|------------|
| Product Specification [产品规格书]:                                    | Document No  | PS-3025-07 |
| Subject [主题]:<br>3.00mm Pitch 3025 Series Connector Specification | Date Issued  | 2012/09/08 |
|                                                                   | Date Revised | 2020/03/12 |
|                                                                   | Version      | B          |

## 【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<br>接触阻抗<br>Contact Resistance                         | 公母配合, 开放电压 20mV 以下, 电流 10mA 检测连接器 A~B 区.<br>Mate connectors, measure by dry circuit, 20mV MAX, 10mA.<br>(Based upon EIA-364-06A).<br> | Initial:<br>10 milliohms Max.<br>After Test:<br>20 milliohms Max. |
| 5-1-2<br>绝缘阻抗<br>Insulation 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.<br>Mate connectors, apply 500V DC between adjacent terminal or ground.<br>(Based upon EIA-364-21B / MIL-STD-202 Method 302 Cond. B)                                          | 1000 Megohms Min.                                                 |
| 5-1-3<br>耐电压<br>Dielectric Strength                         | 公母配合, 在相邻端子, 端子与地片之间, 使用 1000V 的交流电 1 分锺, 检测连接器.<br>Mate connectors, apply 1000V AC for 1 minute between adjacent terminal or ground.<br>(Based upon EIA-364-20A / MIL-STD-202 Method 301)                              | 外观无损伤, 无打火花<br>No Breakdown and Flashover                         |
| 5-1-4<br>铆线后端子接触阻抗<br>Contact resistance on crimped portion | 铆线后之端子, 开放电压 20mV 以下, 电流 10mA 检测连接器.<br>Crimp the applicable wire on to the terminal measure by dry circuit 20mV MAX, 10mA.                                                                                             | 10 milliohms Max.                                                 |



东莞市思索连接器有限公司

SWB Connectors Co., Ltd

Tel.: +86-769-85420488/588/688 Fax: +86-0769-85420988 Web.: [www.SWB.tw](http://www.SWB.tw)

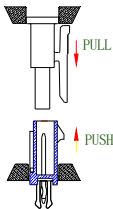
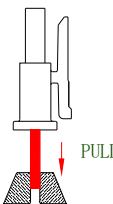
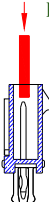
Add.: 广东省东莞市长安镇上角社区上南路 1 号`

#1Shangnan Road,Shangjiao Precinct,Changan Town,Dongguan,Guangdong,523878 CN



|                                                                   |              |            |
|-------------------------------------------------------------------|--------------|------------|
| Product Specification [产品规格书]:                                    | Document No  | PS-3025-07 |
| Subject [主题]:<br>3.00mm Pitch 3025 Series Connector Specification | Date Issued  | 2012/09/08 |
|                                                                   | Date Revised | 2020/03/12 |
|                                                                   | Version      | B          |

## 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<br>插拔力 Insertion<br>& withdraw Force                | <p>以每分钟 <math>50 \pm 3\text{mm}</math> 的速率插入和拔出。<br/>Insert and withdraw Connectors at the speed rate of <math>50 \pm 3\text{mm/minute}</math>.</p>                                                        | <p>参照第 6 项<br/>Refer to paragraph 6</p> |
| 5-2-2<br>端子保持力<br>Terminal/<br>Housing<br>Retention Force | <p>以每分 <math>50 \pm 3\text{mm}</math> 的速率, 将端子从Housing 内轴向拔出的力量。<br/>Apply axial pull out force at the speed rate of <math>50 \pm 3\text{mm/minute}</math> on the terminal assembled in the housing.</p>  | <p>24.5N {2.5kgf} Min.</p>              |
| 5-2-3<br>端子插入力<br>Terminal<br>Insertion Force             | <p>铆线后之端子插入 Housing 所需最大力量。<br/>Insert the crimped terminal into the housing.</p>                                                                                                                                                                                                            | <p>14.7N {1.5kgf} Max.</p>              |
| 5-2-4<br>Pin<br>针保持力<br>Pin Retention<br>Force            | <p>以每分 100mm 的速率, 将 PIN 针从 Wafer 内轴向拔出的力量。<br/>Apply axial push force at the speed rate of 100mm/minute.</p>                                                                                              | <p>13.7N {1.4kgf} min.</p>              |

WRITTEN BY: Alan qin

APPROVED BY: Robing

Sheet: 4 of 7



东莞市思索连接器有限公司

SWB Connectors Co., Ltd

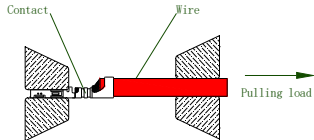
Tel.: +86-769-85420488/588/688 Fax: +86-0769-85420988 Web.: [www.SWB.tw](http://www.SWB.tw)

Add.: 广东省东莞市长安镇上角社区上南路 1 号

#1Shangnan Road, Shangjiao Precinct, Changan Town, Dongguan, Guangdong, 523878 CN



|                                                                   |              |            |
|-------------------------------------------------------------------|--------------|------------|
| Product Specification [产品规格书]:                                    | Document No  | PS-3025-07 |
| Subject [主题]:<br>3.00mm Pitch 3025 Series Connector Specification | Date Issued  | 2012/09/08 |
|                                                                   | Date Revised | 2020/03/12 |
|                                                                   | Version      | B          |

| 项目<br>【Item】 |                                                        | 条件<br>【Test Condition】                                                                                                                                             | 规格<br>【Requirement】                                                                                                                                  |                                |                                |
|--------------|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|
| 5-2-5        | 端子压着强度<br>(Crimped contact)                            | 固定铆线后的端子，使电线与端子分离时所需的最小力量。<br>Fix the crimped terminal, apply axial pull out force on the wire. (Do not crimp insulation part).                                    | AWG(mm <sup>2</sup> )                                                                                                                                | AWG #20<br>0.50mm <sup>2</sup> | AWG #22<br>0.35mm <sup>2</sup> |
|              |                                                        |                                                                                                                                                                    | Spec                                                                                                                                                 | 60N                            | 50N                            |
|              |                                                        | Min. N.                                                                                                                                                            | (85N) a)                                                                                                                                             | (75N) a)                       |                                |
|              |                                                        |                                                                                   | a) If for production reasons, the conductor pull-out strength is measured with insulation crimp, the values in parentheses apply. (Refer to VW60330) |                                |                                |
| 5-2-6        | 公母座带卡扣保持力<br>Male/Female<br>Housing<br>Retention Force | 将插好端子的公母座含卡扣以每分钟 50±3mm 的速度拔出所需要力量。<br>Mateconnectors and apply pull-out force at the speed rate of 50±3mm/min.This Test should be done with positive lock locked. | 58.8N(6.0kgf) MIN                                                                                                                                    |                                |                                |

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

| 项目<br>【Item】 |                                              | 条件<br>【Test Condition】                                                                                                                                                                                                                                                                         | 规格<br>【Requirement】           |                        |
|--------------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------|
| 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 by the rate of 10 cycles per minute.                                                                                                                                                                                     | 接触阻抗<br>Contact<br>Resistance | 20 milliohms Max.      |
| 5-3-2        | 温升测试<br>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 (EIA364-70, Method 1)<br>Mating connectors shall be energized at rating current until thermal stability is achieved, and then measured the termperature rise.<br>(EIA364-70, Method 1)                                                                    | 温升测试<br>Temperature rise      | 30℃ Max.               |
| 5-3-3        | 振动测试<br>Vibration test                       | 振幅: 1.5mm P-P<br>时间: 20~200~20 Hz in 3minute<br>持续时间: 每轴向 3 小时<br>加速度: 44m/S <sup>2</sup><br>开放电压: 20mV 以下<br>开放电流: 10mA 以下<br>Amplitude: 1.5mm P-P<br>Sweep time: 20~200~20 Hz in 3 minute<br>Duration: 3 hours in each X.Y.Z axials. (Based upon EIA-364-28B/MIL-STD-202 Method 213B Cond.A) | 外观<br>Appearance              | 无异状<br>No Damage       |
|              |                                              |                                                                                                                                                                                                                                                                                                | 接触阻抗<br>Contact<br>Resistance | 20 milliohms Max.      |
|              |                                              |                                                                                                                                                                                                                                                                                                | 瞬断<br>Discontinuity           | 1 micro-second<br>Max. |
|              |                                              |                                                                                                                                                                                                                                                                                                | 电压降落<br>Voltage Drop          | 20mV/A Max             |

WRITTEN BY: Alan qin

APPROVED BY: Robing

Sheet: 5 of 7



东莞市思索连接器有限公司

SWB Connectors Co., Ltd

Tel.: +86-769-85420488/588/688 Fax: +86-0769-85420988 Web.: [www.SWB.tw](http://www.SWB.tw)

Add.: 广东省东莞市长安镇上角社区上南路 1 号`

#1Shangnan Road, Shangjiao Precinct, Changan Town, Dongguan, Guangdong, 523878 CN



|                                                                   |              |            |
|-------------------------------------------------------------------|--------------|------------|
| Product Specification [产品规格书]:                                    | Document No  | PS-3025-07 |
| Subject [主题]:<br>3.00mm Pitch 3025 Series Connector Specification | Date Issued  | 2012/09/08 |
|                                                                   | Date Revised | 2020/03/12 |
|                                                                   | Version      | B          |

| 项目<br>【Item】        |                             | 条件<br>【Test Condition】                                                                                                                                                                                               | 规格<br>【Requirement】           |                     |
|---------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|---------------------|
| 5-3-4               | 冲击测试<br>Shock test          | 在 X.Y.Z 上 6 个方向上,以 981m/s <sup>2</sup> (100G 的力量)冲击下各 3 回. 作用时间: 6ms<br>981m/s <sup>2</sup> {100G}, 3 strokes in each X.Y.Z. axes.<br>Operation time:6ms<br>(Based upon EIA-364-27B/MIL-STD-202 Method 213B Cond. A) | 外观<br>Appearance              | 无异状<br>No Damage    |
|                     |                             |                                                                                                                                                                                                                      | 接触阻抗<br>Contact Resistance    | 20 milliohms Max.   |
|                     |                             |                                                                                                                                                                                                                      | 瞬断<br>Discontinuity           | 1 micro-second Max. |
| 5-3-5               | 耐热性<br>Heat Resistance      | 105±2℃, 96 hours.<br>(Based upon MIL-STD-202 Method 108A Cond. A)                                                                                                                                                    | 外观<br>Appearance              | 无异状<br>No Damage    |
|                     |                             |                                                                                                                                                                                                                      | 接触阻抗<br>Contact Resistance    | 20 milliohms Max.   |
| 5-3-6               | 耐寒性<br>Cold Resistance      | -40±3℃, 96 hours.<br>( Based upon EIA-364-105)                                                                                                                                                                       | 外观<br>Appearance              | 无异状<br>No Damage    |
|                     |                             |                                                                                                                                                                                                                      | 接触阻抗<br>Contact Resistance    | 20 milliohms Max.   |
| 5-3-7               | 耐湿性<br>Humidity             | 温度: 40±2℃<br>湿度: 90~95% (RH)<br>持续时间: 96 hours<br>Temperature: 40±2℃<br>Relative Humidity: 90~95%<br>Duration: 96 hours<br>(Based upon EIA-364-31A/MIL-STD-202 Method 103B Cond. B)                                  | 外观<br>Appearance              | 无异状<br>No Damage    |
|                     |                             |                                                                                                                                                                                                                      | 接触阻抗<br>Contact Resistance    | 20 milliohms Max.   |
|                     |                             |                                                                                                                                                                                                                      | 耐电压<br>Dielectric Strength    | Must meet 5-1-3     |
|                     |                             |                                                                                                                                                                                                                      | 绝缘阻抗<br>Insulation Resistance | 500 Megohms Min.    |
| 5-3-8               | 温度变化<br>Temperature Cycling | 从-40℃持续 30 分锺升至+105℃持续 30 分锺, 循环 5 次.<br>5 cycles of: a) -40℃ 30 minutes.<br>b) +105℃ 30 minutes.<br>(Based upon EIA-364-32B)                                                                                        | 外观<br>Appearance              | 无异状<br>No Damage    |
|                     |                             |                                                                                                                                                                                                                      | 接触阻抗<br>Contact Resistance    | 20 milliohms 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 48±1 小时.<br>48±1 hours exposure to a salt spray from the 5±1% solution at 35±2℃.<br>(Based upon EIA-364-26B/MIL-STD-202 Method 101D Cond. B).<br>注: 此项测试只针对先冲后镀端子                        | 外观<br>Appearance              | 无异状<br>No Damage    |
|                     |                             |                                                                                                                                                                                                                      | 接触阻抗<br>Contact Resistance    | 20 milliohms Max.   |
| WRITTEN BY:Alan qin |                             | APPROVED BY:Robing                                                                                                                                                                                                   |                               | Sheet: 6 of 7       |



东莞市思索连接器有限公司

SWB Connectors Co., Ltd

Tel.: +86-769-85420488/588/688 Fax: +86-0769-85420988 Web.: [www.SWB.tw](http://www.SWB.tw)

Add.: 广东省东莞市长安镇上角社区上南路 1 号`

#1Shangnan Road, Shangjiao Precinct, Changan Town, Dongguan, Guangdong, 523878 CN



|                                                                   |              |            |
|-------------------------------------------------------------------|--------------|------------|
| Product Specification [产品规格书]:                                    | Document No  | PS-3025-07 |
| Subject [主题]:<br>3.00mm Pitch 3025 Series Connector Specification | Date Issued  | 2012/09/08 |
|                                                                   | Date Revised | 2020/03/12 |
|                                                                   | Version      | B          |

| 项目<br>【Item】 |                         | 条件<br>【Test Condition】                                                                  | 规格<br>【Requirement】 |                                                                    |
|--------------|-------------------------|-----------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------|
| 5-3-10       | 焊锡附着性<br>Solder-ability | 焊接时间: 3~5 秒.<br>焊接温度: 245±5℃.<br>Soldering time: 3~5sec solder.<br>Temperature: 245±5℃. | Solder Wetting      | 浸渍面积需 95%以上<br>95% of immersed area must show no voids, pin holes. |

#### 【6. 综合插入力及拔出力 INSERTION/WITHDRAWAL FORCE】<Connector mating force>

| PIN 数<br>No. of<br>CKT | 初次插入力(最大值)<br>First Insertion<br>(kgf Max.) | 30 次拔出力(最小值)<br>30 <sup>th</sup> Withdrawal<br>(kgf Min.) | PIN 数<br>No. of<br>CKT | 初次插入力(最大值)<br>First Insertion<br>(kgf Max.) | 30 次拔出力(最小值)<br>30 <sup>th</sup> Withdrawal<br>(kgf Min.) |
|------------------------|---------------------------------------------|-----------------------------------------------------------|------------------------|---------------------------------------------|-----------------------------------------------------------|
| Single                 | 0.8                                         | 0.25                                                      | 7                      | 5.6                                         | 1.75                                                      |
| 2                      | 1.6                                         | 0.50                                                      | 8                      | 6.4                                         | 2.00                                                      |
| 3                      | 2.4                                         | 0.75                                                      | 9                      | 7.2                                         | 2.25                                                      |
| 4                      | 3.2                                         | 1.00                                                      | 10                     | 8.0                                         | 2.50                                                      |
| 5                      | 4.0                                         | 1.25                                                      | 11                     | 8.8                                         | 2.75                                                      |
| 6                      | 4.8                                         | 1.50                                                      | 12                     | 9.6                                         | 3.00                                                      |
| 双排 (DOUBLE ROW)        |                                             |                                                           |                        |                                             |                                                           |
| 2*01                   | 1.6                                         | 0.5                                                       | 2*07                   | 11.2                                        | 3.50                                                      |
| 2*02                   | 3.2                                         | 1.00                                                      | 2*08                   | 12.8                                        | 4.00                                                      |
| 2*03                   | 4.8                                         | 1.50                                                      | 2*09                   | 14.4                                        | 4.50                                                      |
| 2*04                   | 6.4                                         | 2.00                                                      | 2*10                   | 16.0                                        | 5.00                                                      |
| 2*05                   | 8.0                                         | 2.50                                                      | 2*11                   | 17.6                                        | 5.50                                                      |
| 2*06                   | 9.6                                         | 3.00                                                      | 2*12                   | 19.2                                        | 6.00                                                      |

注: 以上插拔次数为 30 次

Note: Insertion and Withdrawal for 30Cycles



|                                                                          |              |            |
|--------------------------------------------------------------------------|--------------|------------|
| <b>Product Specification</b> [产品规格书]:                                    | Document No  | PS-3025-10 |
| <b>Subject</b> [主题]:<br>3.00mm Pitch 3025 Series Connector Specification | Date Issued  | 2019/12/31 |
|                                                                          | Date Revised | 2020/01/04 |
|                                                                          | Version      | B          |

This specification is referred to the 3.00mm series wire to board connector

### 索引【INDEX】

1. 适用范围【Scope】
2. 规格与料号【Spec and Part number】
3. 材质与表面处理【Disposal of Material and surface】
4. 额定等级【Ratings and applicable wires】
5. 性能【Performance】
  - 5-1. 电气的性能【Electrical Performance.】
  - 5-2. 机械的性能【Mechanical Performance】
  - 5-3. 环境性能及其它【Environmental Performance and Others】
6. 综合插入力及拔出力【Insertion/Withdrawal Force】
7. SMT 回流条件【SMT Reflow Condition】



|                                                                          |              |            |
|--------------------------------------------------------------------------|--------------|------------|
| <b>Product Specification [产品规格书]:</b>                                    | Document No  | PS-3025-10 |
| <b>Subject [主题]:</b><br>3.00mm Pitch 3025 Series Connector Specification | Date Issued  | 2019/12/31 |
|                                                                          | Date Revised | 2020/01/04 |
|                                                                          | Version      | B          |

### 【1.适用范围 Scope】

此种规格包括 3.00mm Pitch 3025 Series 连接器规格说明.

This Specification Covers the 3.00mm Pitch 3025 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.                                                            |
|-----------------------|-----------------------------------------------------------------------------------|
| 端子/Terminal           | 3025TF-PSN-V                                                                      |
| 胶壳/Housing            | 3025HM-XX-N0<br>3025HM-2*XX-N0HF-00                                               |
| 针座/Wafer              | 3025WVS-XXD-LPSWW<br>3025WRS-XXD-LPSW<br>3025WVS-2*XXD-LPSW<br>3025WRS-2*XXD-LPSW |

### 【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/Terminal           | 磷铜 (C5191) /Phosphor Bronze | Nickel Plated: 50u" Min ,<br>Bright Tin Plated: 100u" Min |
| 胶壳/Housing            | PA66                        | UL94V-0 Black                                             |
| 针座/Wafer              | Base                        | LCP                                                       |
|                       | PIN                         | UL94V-0 Black                                             |
|                       | Solder tab                  | Nickel Plated: 50u" Min ,<br>Matte Tin Plated: 100u" Min  |

(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                                     |                                      |
| 额定电流 Rated Current (Max.)                                | 5A                                       |                                      |
| 使用温度范围 Ambient temperature Range                         | -40°C~+105°C                             |                                      |
| 适用线径 Applicable wire insulation<br>AWG(mm <sup>2</sup> ) | AWG#20~22<br>(0.50~0.35mm <sup>2</sup> ) | Insulation 绝缘 0.D.<br>1.85mm (Max. ) |

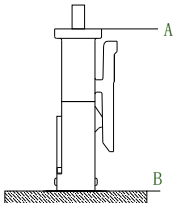
【 \*升温时含端子.Including terminal temperature rise. 】



|                                                                          |              |            |
|--------------------------------------------------------------------------|--------------|------------|
| <b>Product Specification [产品规格书]:</b>                                    | Document No  | PS-3025-10 |
| <b>Subject [主题]:</b><br>3.00mm Pitch 3025 Series Connector Specification | Date Issued  | 2019/12/31 |
|                                                                          | Date Revised | 2020/01/04 |
|                                                                          | Version      | B          |

## 【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<br>接触阻抗<br>Contact Resistance                         | 公母配合,开放电压 20mV 以下,电流 10mA 检测连接器 A~B 区.<br>Mate connectors, measure by dry circuit, 20mV MAX, 10mA.<br>(Based upon EIA-364-06A).<br> | Initial:<br>10 milliohms Max.<br>After Test:<br>20 milliohms Max. |
| 5-1-2<br>绝缘阻抗<br>Insulation 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.<br>Mate connectors, apply 500V DC between adjacent terminal or ground.<br>(Based upon EIA-364-21B / MIL-STD-202 Method 302 Cond.B)                                             | 1000 Megohms Min.                                                 |
| 5-1-3<br>耐电压<br>Dielectric Strength                         | 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.<br>Mate connectors, apply 1000V AC for 1 minute between adjacent terminal or ground.<br>(Based upon EIA-364-20A / MIL-STD-202 Method 301)                                | 外观无损伤, 无打火花<br>No Breakdown and Flashover                         |
| 5-1-4<br>铆线后端子接触阻抗<br>Contact resistance on crimped portion | 铆线后之端子,开放电压 20mV 以下,电流 10mA 检测连接器.<br>Crimp the applicable wire on to the terminal measure by dry circuit 20mV MAX, 10mA.                                                                                             | 10 milliohms Max.                                                 |



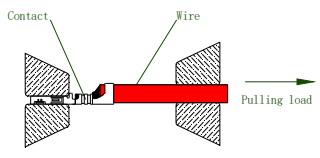
|                                                                          |              |            |
|--------------------------------------------------------------------------|--------------|------------|
| <b>Product Specification [产品规格书]:</b>                                    | Document No  | PS-3025-10 |
| <b>Subject [主题]:</b><br>3.00mm Pitch 3025 Series Connector Specification | Date Issued  | 2019/12/31 |
|                                                                          | Date Revised | 2020/01/04 |
|                                                                          | Version      | B          |

## 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 Insertion<br>& withdraw Force                | 以每分钟 $50 \pm 3\text{mm}$ 的速率插入和拔出。<br>Insert and withdraw Connectors at the speed rate of $50 \pm 3\text{mm/minute}$ .                                                     | 参照第 6 项<br>Refer to paragraph 6       |
|              |                                                  |                                                                                                                                                                            |                                       |
| 5-2-2        | 端子保持力<br>Terminal/<br>Housing<br>Retention Force | 以每分 $50 \pm 3\text{mm}$ 的速率,将端子从 Housing 内轴向拔出的力量。<br>Apply axial pull out force at the speed rate of $50 \pm 3\text{mm/minute}$ on the terminal assembled in the housing. | $24.5\text{N} \{2.5\text{kgf}\}$ Min. |
|              |                                                  |                                                                                                                                                                            |                                       |
| 5-2-3        | 端子插入力<br>Terminal Insertion<br>Force             | 铆线后之端子插入 Housing 所需最大力量。<br>Insert the crimped terminal into the housing.                                                                                                  | $14.7\text{N} \{1.5\text{kgf}\}$ Max. |
| 5-2-4        | Pin<br>针保持力<br>Pin Retention Force               | 以每分 $100\text{mm}$ 的速率,将 PIN 针从 Wafer 内轴向拔出的力量。<br>Apply axial push force at the speed rate of $100\text{mm/minute}$ .                                                     | $14.7\text{N} \{1.5\text{kgf}\}$ Min. |
|              |                                                  |                                                                                                                                                                            |                                       |



|                                                                          |              |            |
|--------------------------------------------------------------------------|--------------|------------|
| <b>Product Specification [产品规格书]:</b>                                    | Document No  | PS-3025-10 |
| <b>Subject [主题]:</b><br>3.00mm Pitch 3025 Series Connector Specification | Date Issued  | 2019/12/31 |
|                                                                          | Date Revised | 2020/01/04 |
|                                                                          | Version      | B          |

| 项目<br>【Item】                                              | 条件<br>【Test Condition】                                                                                                                                               | 规格<br>【Requirement】                                                                                                                                  |
|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5-2-5<br>端子压着强度<br>Crimped contact                        | 固定铆线后的端子, 使电线与端子分离时所需的最小力量。<br>Fix the crimped terminal, apply axial pull out force on the wire. (Do not crimp insulation part).                                     | AWG(mm <sup>2</sup> )<br>AWG #20<br>(0.50mm <sup>2</sup> )<br>AWG #22<br>(0.35mm <sup>2</sup> )                                                      |
|                                                           |                                                                                                                                                                      | Spec Min. N.<br>60N<br>(85N) a)<br>50N<br>(75N) a)                                                                                                   |
|                                                           |                                                                                     | a) If for production reasons, the conductor pull-out strength is measured with insulation crimp, the values in parentheses apply. (Refer to VW60330) |
| 5-2-6<br>公母座带卡扣保持力<br>Male/Female Housing Retention Force | 将插好端子的公母座含卡扣以每分钟 50±3mm 的速度拔出所需要力量。<br>Mate connectors and apply pull-out force at the speed rate of 50±3mm/min. This Test should be done with positive lock locked. | 58.8N(6.0kgf) MIN                                                                                                                                    |

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

| 项目<br>【Item】                                   | 条件<br>【Test Condition】                                                                                                                                                                                                                                                                         | 规格<br>【Requirement】                             |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| 5-3-1<br>重复插拔<br>Repeated Insertion/Withdrawal | 以每分钟不超过 10 次的速率, 将公母插拔 30 次。<br>When mated up to 30 cycles repeatedly by the rate of 10 cycles per minute.                                                                                                                                                                                     | 接触阻抗<br>Contact Resistance<br>20 milliohms Max. |
| 5-3-2<br>温升测试<br>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 (EIA364-70, Method 1)<br>Mating connectors shall be energized at rating current until thermal stability is achieved, and then measured the temperature rise.<br>(EIA364-70, Method 1)                                                                     | 温升测试<br>Temperature rise<br>30°C Max.           |
| 5-3-3<br>振动测试<br>Vibration test                | 振幅: 1.5mm P-P<br>时间: 20~200~20 Hz in 3minute<br>持续时间: 每轴向 3 小时<br>加速度: 44m/S <sup>2</sup><br>开放电压: 20mV 以下<br>开放电流: 10mA 以下<br>Amplitude: 1.5mm P-P<br>Sweep time: 20~200~20 Hz in 3 minute<br>Duration: 3 hours in each X.Y.Z axials. (Based upon EIA-364-28B/MIL-STD-202 Method 213B Cond.A) | 外观<br>Appearance<br>无异状<br>No Damage            |
|                                                |                                                                                                                                                                                                                                                                                                | 接触阻抗<br>Contact Resistance<br>20 milliohms Max. |
|                                                |                                                                                                                                                                                                                                                                                                | 瞬断<br>Discontinuity<br>1 micro-second Max.      |
|                                                |                                                                                                                                                                                                                                                                                                | 电压降落<br>Voltage Drop<br>20mV/A Max              |



|                                                                          |              |            |
|--------------------------------------------------------------------------|--------------|------------|
| <b>Product Specification [产品规格书]:</b>                                    | Document No  | PS-3025-10 |
| <b>Subject [主题]:</b><br>3.00mm Pitch 3025 Series Connector Specification | Date Issued  | 2019/12/31 |
|                                                                          | Date Revised | 2020/01/04 |
|                                                                          | Version      | B          |

| 项目<br>【Item】 |                             | 条件<br>【Test Condition】                                                                                                                                                                                                                                    | 规格<br>【Requirement】           |                     |
|--------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|---------------------|
| 5-3-4        | 冲击测试<br>Shock test          | 在 X.Y.Z 上 6 个方向上,以 $981\text{m/s}^2$ (100G 的力量) 冲击下各 3 回. 作用时间: 6ms<br>$981\text{m/s}^2$ {100G}, 3 strokes in each X.Y.Z. axes.<br>Operation time: 6ms<br>(Based upon EIA-364-27B/MIL-STD-202 Method 213B Cond. A)                                        | 外观<br>Appearance              | 无异状<br>No Damage    |
|              |                             |                                                                                                                                                                                                                                                           | 接触阻抗<br>Contact Resistance    | 20 milliohms Max.   |
|              |                             |                                                                                                                                                                                                                                                           | 瞬断<br>Discontinuity           | 1 micro-second Max. |
| 5-3-5        | 耐热性<br>Heat Resistance      | $105\pm 2^\circ\text{C}$ , 96 hours.<br>(Based upon MIL-STD-202 Method 108A Cond.A)                                                                                                                                                                       | 外观<br>Appearance              | 无异状<br>No Damage    |
|              |                             |                                                                                                                                                                                                                                                           | 接触阻抗<br>Contact Resistance    | 20 milliohms Max.   |
| 5-3-6        | 耐寒性<br>Cold Resistance      | $-40\pm 3^\circ\text{C}$ , 96 hours.<br>(Based upon EIA-364-105)                                                                                                                                                                                          | 外观<br>Appearance              | 无异状<br>No Damage    |
|              |                             |                                                                                                                                                                                                                                                           | 接触阻抗<br>Contact Resistance    | 20 milliohms Max.   |
| 5-3-7        | 耐湿性<br>Humidity             | 温度: $40\pm 2^\circ\text{C}$<br>湿度: 90~95%(RH)<br>持续时间: 96 hours<br>Temperature: $40\pm 2^\circ\text{C}$<br>Relative Humidity: 90~95%<br>Duration: 96 hours<br>(Based upon EIA-364-31A/MIL-STD-202 Method 103B Cond.B)                                     | 外观<br>Appearance              | 无异状<br>No Damage    |
|              |                             |                                                                                                                                                                                                                                                           | 接触阻抗<br>Contact Resistance    | 20 milliohms Max.   |
|              |                             |                                                                                                                                                                                                                                                           | 耐电压<br>Dielectric Strength    | Must meet 5-1-3     |
|              |                             |                                                                                                                                                                                                                                                           | 绝缘阻抗<br>Insulation Resistance | 500 Megohms Min.    |
| 5-3-8        | 温度变化<br>Temperature Cycling | 从 $-40^\circ\text{C}$ 持续 30 分钟升至 $+105^\circ\text{C}$ 持续 30 分钟, 循环 5 次.<br>5 cycles of: a) $-40^\circ\text{C}$ 30 minutes.<br>b) $+105^\circ\text{C}$ 30 minutes.<br>(Based upon EIA-364-32B)                                                             | 外观<br>Appearance              | 无异状<br>No Damage    |
|              |                             |                                                                                                                                                                                                                                                           | 接触阻抗<br>Contact Resistance    | 20 milliohms Max.   |
| 5-3-9        | 盐水喷雾<br>Salt Spray          | 在温度 $35\pm 2^\circ\text{C}$ , 盐水浓度 $5\pm 1\%$ 下, 盐水喷雾 $48\pm 1$ 小时.<br>$48\pm 1$ hours exposure to a salt spray from the $5\pm 1\%$ solution at $35\pm 2^\circ\text{C}$ .<br>(Based upon EIA-364-26A/MIL-STD-202 Method 101D Cond.B).<br>注: 此项测试只针对先冲后镀端子 | 外观<br>Appearance              | 无异状<br>No Damage    |
|              |                             |                                                                                                                                                                                                                                                           | 接触阻抗<br>Contact Resistance    | 20 milliohms Max.   |



|                                                                          |              |            |
|--------------------------------------------------------------------------|--------------|------------|
| <b>Product Specification [产品规格书]:</b>                                    | Document No  | PS-3025-10 |
| <b>Subject [主题]:</b><br>3.00mm Pitch 3025 Series Connector Specification | Date Issued  | 2019/12/31 |
|                                                                          | Date Revised | 2020/01/04 |
|                                                                          | Version      | B          |

| 项目<br>【Item】 |                                       | 条件<br>【Test Condition】                                                                                                         | 规格<br>【Requirement】 |                                                                     |
|--------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------|
| 5-3-10       | 焊锡附着性<br>Solder-ability               | 焊接时间: 3~5 秒.<br>焊接温度: 245±5°C.<br>Soldering time: 3~5sec solder.<br>Temperature: 245±5°C.                                      | Solder Wetting      | 浸渍面积需 95% 以上<br>95% of immersed area must show no voids, pin holes. |
| 5-3-11       | 焊锡耐热性<br>Resistance to Soldering Heat | 焊接时间: 5~10 秒.<br>焊接温度: 255+5/-5°C.<br>Soldering time: 5~10 sec solder.<br>Temperature: 255+5/-5°C.<br>(Based upon EIA-364-56A) | 外观<br>Appearance    | 无异状<br>No Damage                                                    |

**【6.综合插入力及拔出力 INSERTION/WITHDRAWAL FORCE】<Connector mating force>**

| PIN 数<br>No. of CKT | 初次插入力(最大值)<br>First Insertion (kgf Max.) | 30 次拔出力(最小值)<br>30 <sup>th</sup> Withdrawal (kgf Min.) | PIN 数<br>No. of CKT | 初次插入力(最大值)<br>First Insertion (kgf Max.) | 30 次拔出力(最小值)<br>30 <sup>th</sup> Withdrawal (kgf Min.) |
|---------------------|------------------------------------------|--------------------------------------------------------|---------------------|------------------------------------------|--------------------------------------------------------|
| Single              | 1.0                                      | 0.35                                                   | 7                   | 5.6                                      | 1.75                                                   |
| 2                   | 1.6                                      | 0.50                                                   | 8                   | 6.4                                      | 2.00                                                   |
| 3                   | 2.4                                      | 0.75                                                   | 9                   | 7.2                                      | 2.25                                                   |
| 4                   | 3.2                                      | 1.00                                                   | 10                  | 8.0                                      | 2.50                                                   |
| 5                   | 4.0                                      | 1.25                                                   | 11                  | 8.8                                      | 2.75                                                   |
| 6                   | 4.8                                      | 1.50                                                   | 12                  | 9.6                                      | 3.00                                                   |
| 双排 (DOUBLE ROW)     |                                          |                                                        |                     |                                          |                                                        |
| 2*01                | 1.6                                      | 0.50                                                   | 2*07                | 11.2                                     | 3.50                                                   |
| 2*02                | 3.2                                      | 1.00                                                   | 2*08                | 12.8                                     | 4.00                                                   |
| 2*03                | 4.8                                      | 1.50                                                   | 2*09                | 14.4                                     | 4.50                                                   |
| 2*04                | 6.4                                      | 2.00                                                   | 2*10                | 16.0                                     | 5.00                                                   |
| 2*05                | 8.0                                      | 2.50                                                   | 2*11                | 17.6                                     | 5.50                                                   |
| 2*06                | 9.6                                      | 3.00                                                   | 2*12                | 19.2                                     | 6.00                                                   |

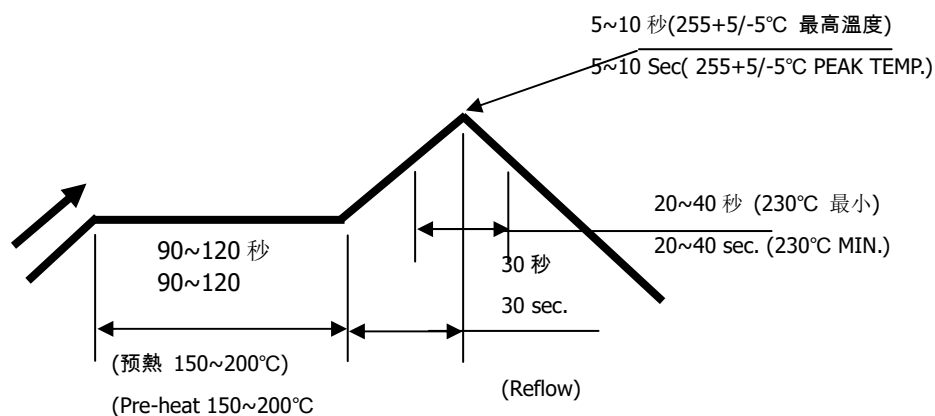
注: 以上插拔次数为 30 次

Note: Insertion and Withdrawal for 30Cycles



|                                                                          |              |            |
|--------------------------------------------------------------------------|--------------|------------|
| <b>Product Specification [产品规格书]:</b>                                    | Document No  | PS-3025-10 |
|                                                                          | Date Issued  | 2019/12/31 |
|                                                                          | Date Revised | 2020/01/04 |
|                                                                          | Version      | B          |
| <b>Subject [主题]:</b><br>3.00mm Pitch 3025 Series Connector Specification |              |            |

### 【7. SMT 回流条件 SMT REFLOW CONDITION】



温度条件曲线图/ 基板上温度

TEMPERATURE CONDITION GRAPH/ (TEMPERATURE ON BOARD PATTERN SIDE)

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.

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.



|                                                                                                                       |              |            |
|-----------------------------------------------------------------------------------------------------------------------|--------------|------------|
| <b>Product Specification</b> [产品规格书]:<br><br><b>Subject</b> [主题]:<br>3.00mm Pitch 3025 Series Connector Specification | Document No  | PS-3025-09 |
|                                                                                                                       | Date Issued  | 2012/09/08 |
|                                                                                                                       | Date Revised | 2020/03/12 |
|                                                                                                                       | Version      | B          |

This specification is referred to the 3.00mm series wire to wire connector

### 索引【INDEX】

1. 适用范围【Scope】
2. 规格与料号【Spec and Part number】
3. 材质与表面处理【Disposal of Material and surface】
4. 额定等级【Ratings and applicable wires】
5. 性能【Performance】
  - 5-1. 电气的性能【Electrical Performance.】
  - 5-2. 机械的性能【Mechanical Performance】
  - 5-3. 环境性能及其它【Environmental Performance and Others】
6. 综合插入力及拔出力【Insertion/Withdrawal Force】



|                                                                   |              |            |
|-------------------------------------------------------------------|--------------|------------|
| Product Specification [产品规格书]:                                    | Document No  | PS-3025-09 |
| Subject [主题]:<br>3.00mm Pitch 3025 Series Connector Specification | Date Issued  | 2012/09/08 |
|                                                                   | Date Revised | 2020/03/12 |
|                                                                   | Version      | B          |

### 【1.适用范围 Scope】

此种规格包括 3.00mm Pitch 3025 Series 连接器规格说明.

This Specification Covers the 3.00mm Pitch 3025 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.                                                    |
|-----------------------|---------------------------------------------------------------------------|
| 端子/Terminal           | 3025TF-PSN-V<br>3025TM-PSN                                                |
| 胶壳/Housing            | 3025HM-XX-XXXX<br>3025HF-XXX-XXXX<br>3025HM-2*XX-XXXX<br>3025HF-2*XX-XXXX |

### 【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/Terminal           | 磷铜(C5191)/Phosphor Bronze | Nickel Plated: 30u" Min<br>Bright Tin Plated: 70u" Min |
| 胶壳/Housing            | PA66                      | UL 94V-2/UL94V-0                                       |

(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                                     |                                      |
| 额定电流 Rated Current (Max.)                                | 5A                                       |                                      |
| 使用温度范围 Ambient temperature Range                         | -40°C~+105°C                             |                                      |
| 适用线径 Applicable wire insulation<br>AWG(mm <sup>2</sup> ) | AWG#20~22<br>(0.50~0.35mm <sup>2</sup> ) | Insulation 绝缘 O.D.<br>1.85mm (Max. ) |

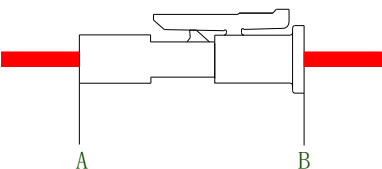
【 \*升温时含端子.Including terminal temperature rise. 】



|                                                  |              |            |
|--------------------------------------------------|--------------|------------|
| <b>Product Specification</b> [产品规格书]:            | Document No  | PS-3025-09 |
|                                                  | Date Issued  | 2012/09/08 |
|                                                  | Date Revised | 2020/03/12 |
|                                                  | Version      | B          |
| <b>Subject</b> [主题]:                             |              |            |
| 3.00mm Pitch 3025 Series Connector Specification |              |            |

## 【5.性能 PERFORMANCE】

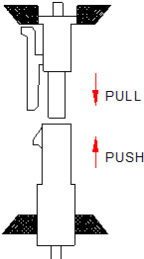
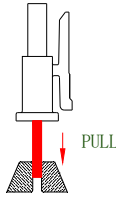
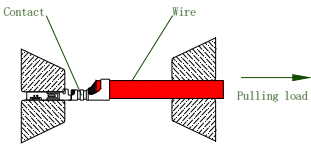
### 5-1. 电气的性能 Electrical Performance.

| 项目<br>【Item】 |                                                    | 条件<br>【Test Condition】                                                                                                                                                                     | 规格<br>【Requirement】                                               |
|--------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 5-1-1        | 接触阻抗<br>Contact Resistance                         | 公母配合, 开放电压 20mV 以下, 电流 10mA 检测连接器 A~B 区.<br>Mate connectors, measure by dry circuit, 20mV MAX, 10mA.<br>(Based upon EIA-364-06A).                                                          | Initial:<br>10 milliohms Max.<br>After Test:<br>20 milliohms Max. |
|              |                                                    |                                                                                                          |                                                                   |
| 5-1-2        | 绝缘阻抗<br>Insulation 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.<br>Mate connectors, apply 500V DC between adjacent terminal or ground.<br>(Based upon EIA-364-21B / MIL-STD-202 Method 302 Cond.B)              | 1000 Megohms Min.                                                 |
| 5-1-3        | 耐电压<br>Dielectric Strength                         | 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.<br>Mate connectors, apply 1000V AC for 1 minute between adjacent terminal or ground.<br>(Based upon EIA-364-20A / MIL-STD-202 Method 301) | 外观无损伤, 无打火花<br>No Breakdown and Flashover                         |
| 5-1-4        | 铆线后端子接触阻抗<br>Contact resistance on crimped portion | 铆线后之端子, 开放电压 20mV 以下, 电流 10mA 检测连接器.<br>Crimp the applicable wire on to the terminal measure by dry circuit 20mV MAX, 10mA.                                                                | 10 milliohms Max.                                                 |



|                                                  |              |            |
|--------------------------------------------------|--------------|------------|
| <b>Product Specification</b> [产品规格书]:            | Document No  | PS-3025-09 |
|                                                  | Date Issued  | 2012/09/08 |
|                                                  | Date Revised | 2020/03/12 |
|                                                  | Version      | B          |
| <b>Subject</b> [主题]:                             |              |            |
| 3.00mm Pitch 3025 Series Connector Specification |              |            |

## 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>& withdraw<br>Force          | 以每分钟 $50 \pm 3\text{mm}$ 的速率插入和拔出。<br>Insert and withdraw Connectors at the speed rate of $50 \pm 3\text{mm/minute}$ .                                                      | 参照第 6 项<br>Refer to paragraph 6                                                                                                                      |                                |                                |
|              |                                                  |                                                                                           |                                                                                                                                                      |                                |                                |
| 5-2-2        | 端子保持力<br>Terminal/<br>Housing<br>Retention Force | 以每分钟 $50 \pm 3\text{mm}$ 的速率,将端子从 Housing 内轴向拔出的力量。<br>Apply axial pull out force at the speed rate of $50 \pm 3\text{mm/minute}$ on the terminal assembled in the housing. | 24.5N {2.5kgf} Min.                                                                                                                                  |                                |                                |
|              |                                                  |                                                                                          |                                                                                                                                                      |                                |                                |
| 5-2-3        | 端子插入力<br>Terminal<br>Insertion Force             | 铆线后之端子插入 Housing 所需最大力量。<br>Insert the crimped terminal into the housing.                                                                                                   | 14.7N {1.5kgf} Max.                                                                                                                                  |                                |                                |
| 5-2-4        | 端子压着强度<br>(Crimped<br>contact)                   | 固定铆线后的端子, 使电线与端子分离时所需的最小力量。<br>Fix the crimped terminal, apply axial pull out force on the wire. (Do not crimp insulation part).                                            | AWG(mm <sup>2</sup> )                                                                                                                                | AWG #20<br>0.50mm <sup>2</sup> | AWG #22<br>0.35mm <sup>2</sup> |
|              |                                                  |                                                                                                                                                                             | Spec Min. N.                                                                                                                                         | 60N<br>(85N) a)                | 50N<br>(75N) a)                |
|              |                                                  |                                                                                          | a) If for production reasons, the conductor pull-out strength is measured with insulation crimp, the values in parentheses apply. (Refer to VW60330) |                                |                                |



|                                       |              |            |
|---------------------------------------|--------------|------------|
| <b>Product Specification</b> [产品规格书]: | Document No  | PS-3025-09 |
|                                       | Date Issued  | 2012/09/08 |
|                                       | Date Revised | 2020/03/12 |
|                                       | Version      | B          |

| 项目<br>【Item】                                                    | 条件<br>【Test Condition】                                                                                                                                                                          | 规格<br>【Requirement】 |
|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 5-2-5<br>公母座带卡扣保持力<br>Male/Female<br>Housing<br>Retention Force | 将插好端子的公母座含卡扣以每分钟 $50 \pm 3\text{mm}$ 的速度拔出所需要力量。<br>Mate connectors and apply pull-out force at the speed rate of $50 \pm 3\text{mm/min}$ . This Test should be done with positive lock locked. | 58.8N(6.0kgf) MIN   |

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

| 项目<br>【Item】                                          | 条件<br>【Test Condition】                                                                                                                                                                                                                                                                                                             | 规格<br>【Requirement】                             |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| 5-3-1<br>重复插拔<br>Repeated<br>Insertion/<br>Withdrawal | 以每分钟不超过 10 次的速率,将公母插拔 30 次。<br>When mated up to 30 cycles repeatedly by the rate of 10 cycles per minute.                                                                                                                                                                                                                          | 接触阻抗<br>Contact Resistance<br>20 milliohms Max. |
| 5-3-2<br>温升测试<br>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 (EIA364-70, Method 1)<br>Mating connectors shall be energized at rating current until thermal stability is achieved, and then measured the temperature rise.<br>(EIA364-70, Method 1)                                                                                                         | 温升测试<br>Temperature rise<br>30°C Max.           |
| 5-3-3<br>振动测试<br>Vibration test                       | 振幅: 1.5mm P-P<br>时间: $20 \sim 200 \sim 20\text{ Hz}$ in 3minute<br>持续时间: 每轴向 3 小时<br>加速度: $44\text{m/S}^2$<br>开放电压: 20mV 以下<br>开放电流: 10mA 以下<br>Amplitude: 1.5mm P-P<br>Sweep time: $20 \sim 200 \sim 20\text{ Hz}$ in 3 minute<br>Duration: 3 hours in each X.Y.Z axials. (Based upon EIA-364-28B/MIL-STD-202 Method 213B Cond.A) | 外观<br>Appearance<br>无异状<br>No Damage            |
|                                                       |                                                                                                                                                                                                                                                                                                                                    | 接触阻抗<br>Contact Resistance<br>20 milliohms Max. |
|                                                       |                                                                                                                                                                                                                                                                                                                                    | 瞬断<br>Discontinuity<br>1 micro-second Max.      |
|                                                       |                                                                                                                                                                                                                                                                                                                                    | 电压降落<br>Voltage Drop<br>20mV/A Max              |
| 5-3-4<br>冲击测试<br>Shock test                           | 在 X.Y.Z 上 6 个方向上, 以 $981\text{m/s}^2$ (100G 的力量) 冲击下各 3 回. 作用时间: 6ms<br>$981\text{m/s}^2$ {100G}, 3 strokes in each X.Y.Z. axes.<br>Operation time: 6ms<br>(Based upon EIA-364-27B/MIL-STD-202 Method 213B Cond. A)                                                                                                                | 外观<br>Appearance<br>无异状<br>No Damage            |
|                                                       |                                                                                                                                                                                                                                                                                                                                    | 接触阻抗<br>Contact Resistance<br>20 milliohms Max. |
|                                                       |                                                                                                                                                                                                                                                                                                                                    | 瞬断<br>Discontinuity<br>1 micro-second Max.      |



|                                                                          |              |            |
|--------------------------------------------------------------------------|--------------|------------|
| <b>Product Specification</b> [产品规格书]:                                    | Document No  | PS-3025-09 |
|                                                                          | Date Issued  | 2012/09/08 |
|                                                                          | Date Revised | 2020/03/12 |
|                                                                          | Version      | B          |
| <b>Subject</b> [主题]:<br>3.00mm Pitch 3025 Series Connector Specification |              |            |

| 项目<br>【Item】 |                             | 条件<br>【Test Condition】                                                                                                                                                              | 规格<br>【Requirement】           |                   |
|--------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------|
| 5-3-5        | 耐热性<br>Heat Resistance      | 105±2°C, 96 hours.<br>(Based upon MIL-STD-202 Method 108A Cond.A)                                                                                                                   | 外观<br>Appearance              | 无异状<br>No Damage  |
|              |                             |                                                                                                                                                                                     | 接触阻抗<br>Contact Resistance    | 20 milliohms Max. |
| 5-3-6        | 耐寒性<br>Cold Resistance      | -40±3°C, 96 hours.<br>(Based upon EIA-364-105)                                                                                                                                      | 外观<br>Appearance              | 无异状<br>No Damage  |
|              |                             |                                                                                                                                                                                     | 接触阻抗<br>Contact Resistance    | 20 milliohms Max. |
| 5-3-7        | 耐湿性<br>Humidity             | 温度: 40±2°C<br>湿度: 90~95%(RH)<br>持续时间: 96 hours<br>Temperature: 40±2°C<br>Relative Humidity: 90~95%<br>Duration: 96 hours<br>(Based upon EIA-364-31A/MIL-STD-202 Method 103B Cond.B) | 外观<br>Appearance              | 无异状<br>No Damage  |
|              |                             |                                                                                                                                                                                     | 接触阻抗<br>Contact Resistance    | 20 milliohms Max. |
|              |                             |                                                                                                                                                                                     | 耐电压<br>Dielectric Strength    | Must meet 5-1-3   |
|              |                             |                                                                                                                                                                                     | 绝缘阻抗<br>Insulation Resistance | 500 Megohms Min.  |
| 5-3-8        | 温度变化<br>Temperature Cycling | 从-40°C持续 30 分钟升至+105°C持续 30 分钟, 循环 5 次.<br>5 cycles of: a) -40°C 30 minutes.<br>b) +105°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 Resistance    | 20 milliohms Max. |



|                                                                          |                    |                                                                                                                                                                                                                                                                |                            |                   |
|--------------------------------------------------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------|
| <b>Product Specification [产品规格书]:</b>                                    |                    |                                                                                                                                                                                                                                                                | Document No                | PS-3025-09        |
| <b>Subject [主题]:</b><br>3.00mm Pitch 3025 Series Connector Specification |                    |                                                                                                                                                                                                                                                                | Date Issued                | 2012/09/08        |
|                                                                          |                    |                                                                                                                                                                                                                                                                | Date Revised               | 2020/03/12        |
|                                                                          |                    |                                                                                                                                                                                                                                                                | Version                    | B                 |
| 5-3-9                                                                    | 盐水喷雾<br>Salt Spray | 在温度 $35\pm 2^{\circ}\text{C}$ , 盐水浓度 $5\pm 1\%$ 下, 盐水喷雾 $48\pm 1$ 小时.<br>48 $\pm 1$ hours exposure to a salt spray from the $5\pm 1\%$ solution at $35\pm 2^{\circ}\text{C}$ .<br>(Based upon EIA-364-26A/MIL-STD-202 Method 101D Cond.B).<br>注: 此项测试只针对先冲后镀端子 | 外观<br>Appearance           | 无异状<br>No Damage  |
|                                                                          |                    |                                                                                                                                                                                                                                                                | 接触阻抗<br>Contact Resistance | 20 milliohms Max. |

**【6.综合插入力及拔出力 INSERTION/WITHDRAWAL FORCE】<Connector mating force>**

| PIN 数<br>No. of<br>CKT | 初次插入力(最大值)<br>First Insertion<br>(kgf Max.) | 30 次拔出力(最小值)<br>30 <sup>th</sup> Withdrawal<br>(kgf Min.) | PIN 数<br>No. of<br>CKT | 初次插入力(最大值)<br>First Insertion<br>(kgf Max.) | 30 次拔出力(最小值)<br>30 <sup>th</sup> Withdrawal<br>(kgf Min.) |
|------------------------|---------------------------------------------|-----------------------------------------------------------|------------------------|---------------------------------------------|-----------------------------------------------------------|
| Single                 | /                                           | /                                                         | 7                      | 5.6                                         | 1.75                                                      |
| 2                      | 1.6                                         | 0.50                                                      | 8                      | 6.4                                         | 2.00                                                      |
| 3                      | 2.4                                         | 0.75                                                      | 9                      | 7.2                                         | 2.25                                                      |
| 4                      | 3.2                                         | 1.00                                                      | 10                     | 8.0                                         | 2.50                                                      |
| 5                      | 4.0                                         | 1.25                                                      | 11                     | 8.8                                         | 2.75                                                      |
| 6                      | 4.8                                         | 1.50                                                      | 12                     | 9.6                                         | 3.00                                                      |
| 双排 (DOUBLE ROW)        |                                             |                                                           |                        |                                             |                                                           |
| 2*01                   | 1.6                                         | 0.50                                                      | 2*07                   | 11.2                                        | 3.50                                                      |
| 2*02                   | 3.2                                         | 1.00                                                      | 2*08                   | 12.8                                        | 4.00                                                      |
| 2*03                   | 4.8                                         | 1.50                                                      | 2*09                   | 14.4                                        | 4.50                                                      |
| 2*04                   | 6.4                                         | 2.00                                                      | 2*10                   | 16.0                                        | 5.00                                                      |
| 2*05                   | 8.0                                         | 2.50                                                      | 2*11                   | 17.6                                        | 5.50                                                      |
| 2*06                   | 9.6                                         | 3.00                                                      | 2*12                   | 19.2                                        | 6.00                                                      |

注: 以上插拔次数为 30 次

Note: Insertion and Withdrawal for 30Cycles