



产品规格书

PRODUCT SPECIFICATION

产品描述: TJC1003 系列扁平电缆连接器

Product Description: TJC1003 Series Flat Cable Connector

目录

Index

1. 更改履历 Change History
2. 范围 Scope
3. 产品描述 Product Description
4. 相关标准 Related Standards
5. 参数范围 Parameter Ratings
6. 产品性能 Performance
7. 测试分组 Test Sequences

| | | |
|--|-------------------------------|---|
| CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd. | 制定 Edit: 覃 丽 2018-5-6 | 产品名称 Product Name: TJC1003 系列 |
| | 审核 Check: 王国英 2018-5-6 | 编号 Document No.: PS3912 |
| 中国·浙江省乐清市虹桥镇幸福东路 1098 号 合兴工业园 1098,Xingfu `Road(East),CWB Industrial Zone,Hongqiao,Yueqing,Zhejiang 325608,China Tel: 86-577-61313157 Fax: 86-577-62313681 | 批准 Approval : 刘冬旭 2018-5-6 | 版本 REVISION: 1 |



产品规格书

PRODUCT SPECIFICATION

1. 更改履历 Change History

| 序号 No.: | 版本号 Version No. | 更改前描述 Description Before Modification | 更改后描述 Description After Modification | 更改人/日期 Reviser/Date |
|------------|--------------------|--|---|------------------------|
| 1 | 1 | 旧版本规格书 PS0981/PS0771 | 新版本规格书 | 杨培 2019-01-16 |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |

| | | | | | |
|-----------------------|------------|--------------------|--------|-------------------|---|
| 产品名称 Product Name: | TJC1003 系列 | 编号 Document No. | PS3912 | 版本号 VersionNo. | 1 |
|-----------------------|------------|--------------------|--------|-------------------|---|

2. 适用范围 Scope

本产品规格书适用于浙江合兴电子元件有限公司生产的 1.0mm 间距的扁平电缆连接器，产品名称：TJC1003-nA & TJC1003-nAW。

This product specification covers the requirement for 1.0mm pitch Flat Cable Connector, which are designed and manufactured by CWB Electronics(ZheJiang) Co.,LTD. P/N: TJC1003-nA & TJC1003-nAW.

3. 产品描述 Product Description

TJC1003 系列扁平电缆连接器为家电连接器产品，产品部件组成如下：

The TJC1003 series flat cable connector designed for home appliances connection. Part checklist as following form:

| Name | Part name | Notes |
|---------------------------------|-----------------|--|
| 扁平电缆连接器 Flat Cable Connector | TJC1003-nA | WAFER: PPS,UL94V-0, Black Terminal: Phosphor Bronze, Tin over Nickel plated |
| 扁平电缆连接器 Flat Cable Connector | TJC1003-nAW | WAFER: PPS,UL94V-0, Black Terminal: Phosphor Bronze, Tin over Nickel plated |
| 扁平电缆连接器 Flat Cable Connector | TJC1003-18AW 镀金 | WAFER: PPS,UL94V-0, Black Terminal: Phosphor Bronze, G over Nickel plated |

4. 相关标准 Related Standards

以下参考文件是本规格书的一个组成部份。若本规格书中的要求与产品图纸发生冲突，则产品图中的要求为优先；若本规格书中的要求与参考文件中的要求冲突，则本规格书为优先。

The following documents form a part of this specification. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

| | | |
|-----------|--|-----------------------------|
| GB/T 2421 | 电工电子产品环境试验 第一部分 总则 Testing Method for Environmental of Electrical Connectors | Class 1: General Principles |
| GB/T 2423 | 电工电子产品环境试验方法 Testing Method for Environmental of Electrical Connectors | |
| GB/T 2424 | 电工电子产品环境试验导则 Testing Method for Environmental of Electrical Connectors | |
| GB/T 5095 | 电子设备用机电元件基本试验规程及测量方法 Testing procedure/ Method for components of electric equipment | |

产品符合合兴企标 Q/HX J1150001 《产品及所用材料的环保要求》 I 类或顾客要求。

The connector should comply with CWB standard Q/HX J1150001 Class I or customer's requests

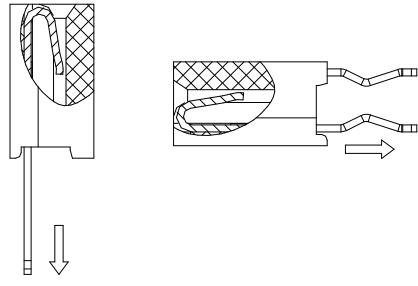
| | | | | | |
|-----------------------|------------|--------------------|--------|-------------------|---|
| 产品名称 Product Name: | TJC1003 系列 | 编号 Document No. | PS3912 | 版本号 VersionNo. | 1 |
|-----------------------|------------|--------------------|--------|-------------------|---|

5. 参数范围 Parameter Ratings:

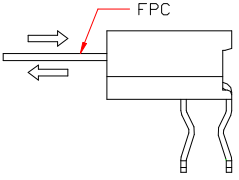
| | |
|--|----------------------------|
| 额定电流 Rated Current | 0.5A |
| 额定电压 Rated Voltage | 50V [AC(有效值 rms)/DC] |
| 使用温度范围 (包含温升) Operating temperature range (Include temperature rise) | -25°C ~ +85°C |
| 保存温湿度范围和周期 storage temperature range humidity range and storage time | 5°C ~ 35°C, RH ≤ 60%, 6 个月 |
| 适用 PCB 板厚度 Applicable PCB Thickness | 1.2mm ~ 1.6mm |
| UL 认证 UL Standards | E200881 |

6. 产品性能 Performance

6.1 机械性能 Mechanical

| 序号 No. | 项 目 Item | 测试条件 Test Condition | 规 格 Requirement |
|--------|---|---|--|
| 6.1.1 | 外观 Appearance | 目测 Checking by eyes 视力: 1.0 以上 Eyesight: > 1.0 照明: (200~300) lx Lamp: (200~300) lx 目测距离: (0.3~0.5) m Space: (0.3~0.5) m GB/T 5095.1 Method 1a | 金属件表面无明显的机械损伤、锈蚀、氧化及镀层脱落等缺陷。 There should be no obvious mechanical damage, corrosion, oxidation and coating loss on the surface of metal parts. 无腐蚀、污点、破损、变形及功能损害。 Products should be free from corrosion, stains, breakage, deformation and functional damage. |
| 6.1.2 | 插针固定力 Retention Force of terminal | 在试验装置夹头中固定试验样品, 在插针连接的轴线方向施加拉力; 速度 25 mm/min. Fix the crimped contact, axial pull out force on the contact in the housing at a rate of 25 mm/min.  | 4.9牛/针 4.9 N MIN (500gf MIN) /pin GB/T5095.8 Method 16d / EIA-364-08B |

| | | | | | |
|-----------------------|------------|--------------------|--------|-------------------|---|
| 产品名称 Product Name: | TJC1003 系列 | 编号 Document No. | PS3912 | 版本号 VersionNo. | 1 |
|-----------------------|------------|--------------------|--------|-------------------|---|

| | | | |
|-------|--|--|---|
| 6.1.3 | FPC/FFC 插拔力 FPC/FFC insertion & separation force | <p>固定连接器和/或测力计，在连接器轴线方向插入和拔出；速度 25mm/min.</p> <p>Apply Axial Insert and withdraw force on the header in the housing at a rate of 25 mm/min.</p> <div style="text-align: center;">  </div> <p>GB/T 5095.7 Method 13b / EIA-364-13B</p> | <p>插拔力参照下表6.1.3.1和6.1.3.2</p> <p>Refer to sheet 6.1.3.1 and 6.1.3.2</p> |
|-------|--|--|---|

| 6.1.3.1 FPC (Flexible printed circuit) | | | | |
|--|---------------------------------------|-------------|--|-------------|
| 极数 No. of pos | 插入力 Insertion force (N MAX (kgf MAX)) | | 拔去力 Separation force (N MIN (kgf MIN)) | |
| | 开始 Initial | 20 次后 20 th | 开始 Initial | 20 次后 20 th |
| 3 | 6.60(0.67) | 5.85(0.59) | 0.90(0.09) | 0.75(0.07) |
| 4 | 8.80(0.89) | 7.80(0.79) | 1.20(0.12) | 1.00(0.09) |
| 5 | 11.00(1.12) | 9.75(0.99) | 1.50(0.15) | 1.25(0.12) |
| 6 | 13.20(1.34) | 11.70(1.19) | 1.80(0.18) | 1.50(0.15) |
| 7 | 15.40(1.57) | 13.65(1.39) | 2.10(0.21) | 1.75(0.17) |
| 8 | 17.60(1.79) | 15.60(1.59) | 2.40(0.24) | 2.00(0.20) |
| 9 | 19.80(2.02) | 17.55(1.79) | 2.70(0.27) | 2.25(0.22) |
| 10 | 22.00(2.24) | 19.50(1.99) | 3.00(0.30) | 2.50(0.25) |
| 11 | 24.20(2.46) | 21.45(2.18) | 3.30(0.33) | 2.75(0.27) |
| 12 | 26.40(2.69) | 23.40(2.38) | 3.60(0.36) | 3.00(0.30) |
| 13 | 28.60(2.91) | 25.30(2.38) | 3.90(0.39) | 3.25(0.32) |
| 14 | 30.80(3.14) | 27.30(2.78) | 4.20(0.42) | 3.50(0.35) |
| 15 | 33.00(3.36) | 29.25(2.98) | 4.50(0.45) | 3.75(0.38) |
| 16 | 35.20(3.59) | 31.20(3.18) | 4.80(0.48) | 4.00(0.40) |
| 17 | 37.40(3.81) | 33.15(3.38) | 5.10(0.52) | 4.25(0.43) |
| 18 | 39.60(4.04) | 35.10(3.58) | 5.40(0.55) | 4.50(0.45) |
| 19 | 41.80(4.26) | 37.05(3.78) | 5.70(0.58) | 4.75(0.48) |
| 20 | 44.00(4.48) | 39.00(3.97) | 6.00(0.61) | 5.00(0.51) |
| 21 | 46.20(4.71) | 40.95(4.17) | 6.30(0.64) | 5.25(0.53) |
| 22 | 48.40(4.93) | 42.90(4.37) | 6.60(0.67) | 5.50(0.56) |
| 23 | 50.60(5.16) | 44.85(4.57) | 6.90(0.70) | 5.75(0.58) |
| 24 | 52.80(5.38) | 46.80(4.77) | 7.20(0.73) | 6.00(0.61) |
| 25 | 55.00(5.61) | 48.75(4.97) | 7.50(0.76) | 6.25(0.63) |
| 26 | 57.20(5.83) | 50.70(5.17) | 7.80(0.79) | 6.50(0.66) |
| 27 | 59.40(6.06) | 52.65(5.37) | 8.10(0.82) | 6.75(0.68) |
| 28 | 61.60(6.28) | 54.60(5.57) | 8.40(0.85) | 7.00(0.71) |
| 29 | 63.80(6.51) | 56.55(5.77) | 8.70(0.88) | 7.25(0.73) |
| 30 | 66.00(6.73) | 58.50(5.96) | 9.00(0.91) | 7.50(0.76) |

| | | | | | |
|-----------------------|------------|--------------------|--------|-------------------|---|
| 产品名称 Product Name: | TJC1003 系列 | 编号 Document No. | PS3912 | 版本号 VersionNo. | 1 |
|-----------------------|------------|--------------------|--------|-------------------|---|



产品规格书

PRODUCT SPECIFICATION

6.1.3.2 FFC (Flexible flat circuit)

| 极数 No. of pos | 插入力 Insertion force (N MAX (kgf MAX)) | | 拔去力 Separation force (N MIN (kgf MIN)) | |
|------------------|---------------------------------------|-------------|--|-------------|
| | 开始 Initial | 20 次后 20 th | 开始 Initial | 20 次后 20 th |
| 3 | 6.00(0.61) | 5.25(0.53) | 0.60(0.06) | 0.40(0.04) |
| 4 | 8.00(0.81) | 7.00(0.71) | 0.80(0.08) | 0.60(0.06) |
| 5 | 10.00(1.02) | 8.75(0.89) | 1.00(0.10) | 0.75(0.07) |
| 6 | 12.00(1.22) | 10.50(1.07) | 1.20(0.12) | 0.90(0.09) |
| 7 | 14.00(1.42) | 12.25(1.25) | 1.40(0.14) | 1.05(0.10) |
| 8 | 16.00(1.63) | 14.00(1.42) | 1.60(0.16) | 1.20(0.12) |
| 9 | 18.00(1.83) | 15.75(1.60) | 1.80(0.18) | 1.35(0.13) |
| 10 | 20.00(2.04) | 17.50(1.78) | 2.00(0.20) | 1.50(0.15) |
| 11 | 22.20(2.24) | 19.25(1.96) | 2.20(0.22) | 1.65(0.16) |
| 12 | 24.00(2.44) | 21.00(2.14) | 2.40(0.24) | 1.80(0.18) |
| 13 | 26.00(2.65) | 22.75(2.32) | 2.60(0.26) | 1.95(0.19) |
| 14 | 28.00(2.85) | 24.50(2.50) | 2.80(0.28) | 2.10(0.210) |
| 15 | 30.00(3.06) | 26.25(2.67) | 3.00(0.30) | 2.25(0.22) |
| 16 | 32.00(3.26) | 28.00(2.85) | 3.20(0.32) | 2.40(0.24) |
| 17 | 34.00(3.46) | 29.75(3.03) | 3.40(0.34) | 2.55(0.26) |
| 18 | 36.00(3.67) | 31.50(3.21) | 3.60(0.36) | 2.70(0.27) |
| 19 | 38.00(3.87) | 33.25(3.39) | 3.80(0.38) | 2.85(0.29) |
| 20 | 40.00(4.08) | 35.00(3.57) | 4.00(0.40) | 3.00(0.30) |
| 21 | 42.00(4.28) | 36.75(3.75) | 4.20(0.42) | 3.15(0.32) |
| 22 | 44.00(4.48) | 38.50(3.87) | 4.40(0.44) | 3.30(0.33) |
| 23 | 46.00(4.69) | 40.25(4.10) | 4.60(0.46) | 3.45(0.35) |
| 24 | 48.00(4.89) | 42.00(4.28) | 4.80(0.48) | 3.60(0.36) |
| 25 | 50.00(5.10) | 43.75(4.46) | 5.00(0.51) | 3.75(0.38) |
| 26 | 52.00(5.30) | 45.50(4.64) | 5.20(0.53) | 3.90(0.39) |
| 27 | 54.00(5.51) | 47.25(4.82) | 5.40(0.55) | 4.05(0.41) |
| 28 | 56.00(5.71) | 49.00(5.00) | 5.60(0.57) | 4.20(0.42) |
| 29 | 58.00(5.91) | 50.75(5.17) | 5.80(0.59) | 4.35(0.44) |
| 30 | 60.00(6.12) | 52.50(5.35) | 5.06(0.61) | 4.50(0.45) |

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
|--|--|--|--|--|--|

| | | | | | |
|-----------------------|------------|--------------------|--------|-------------------|---|
| 产品名称 Product Name: | TJC1003 系列 | 编号 Document No. | PS3912 | 版本号 VersionNo. | 1 |
|-----------------------|------------|--------------------|--------|-------------------|---|



产品规格书

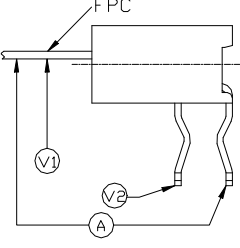
PRODUCT SPECIFICATION

| 序号 No. | 项 目 Item | 测试条件 Test Condition | 规 格 Requirement |
|--------|-----------------------------|---|---|
| 6.1.4 | 机械振动 Random Vibration | <p>插合连接器, 串联在一直流电源上, 电流100mA; 并模拟正常工作状态; 振频为 (10~55~10) Hz, 每个循环时间为1分钟, 振幅1.52mm。沿XYZ三轴正反方向各循环2h。</p> <p>Mated connectors subjected to following vibration conditions, for a period of 2 hours in each of 3 mutually perpendicular axes, 100 mA current shall be applied.</p> <p>Frequency: (10~55~10) HZ/min.</p> <p>Amplitude: 1.52mm</p> <p>GB/T 5095.4 Method 6d / EIA-364-28D</p> | <p>外观: 无损伤 (参照6.1.1)</p> <p>Appearance: No damage.(refer to 6.1.1)</p> <p>接触电阻: 0.03Ω MAX</p> <p>Contact resistance: 0.03Ω Max.</p> <p>中断: 1μsec Max.</p> <p><1μsec discontinuity</p> |
| 6.1.5 | 机械冲击 Shock | <p>连接器相配, 沿XYZ三轴正反方向各冲击3次(总共18次), 在测试过程中通以100mA电流。</p> <p>冲击强度: 490m/s²</p> <p>持续时间: 11ms</p> <p>Mated connectors and subject to the following shock conditions, 3 times of shock shall be applied for each 6 directions along 3 mutually perpendicular axes, passing DC 100mA current during the test.(Total of 18 shocks)</p> <p>Test Pulse:</p> <p>Half Sine Peak Value: 490m/s²</p> <p>Duration: 11ms</p> <p>GB/T 5095.4 Method 6c / EIA-364-27B</p> | <p>外观: 无损伤 (参照6.1.1)</p> <p>Appearance: No damage.(refer to 6.1.1)</p> <p>中断: 1μsec Max.</p> <p><1μsec discontinuity</p> |
| 6.1.6 | 机械寿命 Durability | <p>以每分钟 10 次的速度插拔 20 次。</p> <p>20 cycles mating and unmating test at the speed 10 cycles per minute</p> <p>GB/T 5095.5 Method 9A / EIA-364-09C</p> | <p>外观: 无损伤 (参照6.1.1)</p> <p>Appearance: No damage.(refer to 6.1.1)</p> <p>接触电阻: 0.03Ω Max.</p> <p>Contact resistance: 0.03Ω Max.</p> |

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
|--|--|--|--|--|--|

| | | | | | |
|-----------------------|------------|--------------------|--------|-------------------|---|
| 产品名称 Product Name: | TJC1003 系列 | 编号 Document No. | PS3912 | 版本号 VersionNo. | 1 |
|-----------------------|------------|--------------------|--------|-------------------|---|

6.2 电气性能 Electrical

| 序号 No. | 项 目 Item | 测试条件 Test Condition | 规格 Requirement |
|-----------|----------------------------------|--|--|
| 6.2.1 | 接触电阻 Contact Resistance | <p>在以下条件下,在 V1、V2 之间,低水平电阻应以回针法测试。</p> <p>Under the condition below,low level contact resistance shall be measured between V1 and V2 by four-probe method.</p>  <p>GB/T 5095.2 Method 2a / EIA-364-23B</p> | <p>接触电阻: 0.03 Ω Max.</p> <p>Contact resistance: 0.03Ω Max.</p> |
| 6.2.2 | 绝缘电阻 Insulation Resistance | <p>在端子之间,及端子与壳体之间加以 500 V 直流电,保持 1 分钟.</p> <p>DC 500 V shall be applied between contacts and between an individual contact and a case for 1 min.</p> <p>GB/T 5095.2 Method 3a / EIA-364-21C</p> | 1000 MΩ Min. (Initial) |
| 6.2.3 | 耐电压 Withstand Voltage | <p>相邻接触件之间或地线之间施加 500V AC (有效值),漏电流 1mA 的电压作用,时间 1min.</p> <p>Apply a voltage of AC 500V for 1 minute between adjacent contacts and between contacts to ground.</p> <p>GB/T 5095.2 Method 4a / EIA-364-20B</p> | <p>外观: 无击穿和飞弧现象</p> <p>Appearance: No Breakdown or flashover</p> |
| 6.2.4 | 温升 Temperature Rise | <p>插合连接器,通以最大允许电流,测温度的差值。</p> <p>额定电流 (0.5A, 1.0A)</p> <p>Mated connectors and measure the temperature rise of contact when the maximum AC rated current is passed.</p> <p>Current rating (0.5A,1.0A)</p> <p>GB/T 5095.3 Method 5a / EIA-364-70A</p> | Δ30℃ Max.(Δ30K Max) |

| | | | | | |
|-----------------------|------------|--------------------|--------|-------------------|---|
| 产品名称 Product Name: | TJC1003 系列 | 编号 Document No. | PS3912 | 版本号 VersionNo. | 1 |
| PAGE: 8 / 12 | | | | | |



产品规格书

PRODUCT SPECIFICATION

6.3 环境性能 Environmental

| 序号 No. | 项 目 Item | 测试条件 Test Condition | 规 格 Requirement | | | | | | | | | | |
|----------------|-----------------------------|--|---|--------------------|-------|----|-------|-------|-------|----|-------|-------|--|
| 6.3.1 | 耐高温 Heat Resistance | 连接器配合后, 于 105±2℃ 的环境中放置 240 小时, 再回到室温中放置 1-2 小时测定 Mated connectors exposed to the condition of 105±2℃ for 240 hours. Recovery time 1~2 hours GB/T 5095.6 Method 11i / EIA-364-17B | 外观: 无损伤 (参照6.1.1) Appearance: No damage.(refer to 6.1.1) 接触电阻: 0.03Ω Max. Contact resistance: 0.03Ω Max. | | | | | | | | | | |
| 6.3.2 | 耐低温 Cold Resistance | 连接器配合后, 于 -40±2℃ 的空气中放置 96 小时, 再回到室温中放置 1-2 小时测定 Mated connectors exposed to the condition of -40±2℃ for 96 hours. Recovery time 1~2 hours GB/T 5095.6 Method 11j / EIA-364-17B | 外观: 无损伤 (参照6.1.1) Appearance: No damage.(refer to 6.1.1) 接触电阻: 0.03Ω Max. Contact resistance: 0.03Ω Max. | | | | | | | | | | |
| 6.3.3 | 恒定湿热 Humidity | 温度 40±2℃, 相对湿度(90~95)% 搁置时间 96h, 取出恢复 1~2h 后检查. Mated connectors exposed to the condition of 40±2℃ (90~95) % Humidity for 96 hours. Recovery time 1~2 hours GB/T 5095.6 Method 11c / EIA-364-31B | 外观: 无损伤 (参照6.1.1) Appearance: No damage.(refer to 6.1.1) 接触电阻: 0.03Ω Max. Contact resistance: 0.03Ω Max. 绝缘电阻: 100 MΩ Min. Insulation Resistance : 100 MΩ Min. 耐电压: 无击穿和飞弧现象. Withstand Voltage: No Breakdown or flashover. | | | | | | | | | | |
| 6.3.4 | 温度循环 Temperature Cycling | 把试验样品分别放入高、低温试验箱中, 按下列步骤调试温度: a) 在(-55±2)℃ 的恒温条件下放置 0.5h; b) 在(85±2)℃ 的恒温条件下放置 0.5h; 从 a)到 b)为一个循环周期, 共进行 5 个循环,恢复 1~2h 后检查。 Mated connectors shall be tested under the following conditions <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Temperature °C</th> <th>Duration (Minutes)</th> </tr> </thead> <tbody> <tr> <td>1 -55</td> <td>30</td> </tr> <tr> <td>2 +25</td> <td>5Max.</td> </tr> <tr> <td>3 +85</td> <td>30</td> </tr> <tr> <td>4 +25</td> <td>5Max.</td> </tr> </tbody> </table> Step 1 to 4 is one cycle, 5 cycles shall be tested. Recovery time 1~2 hours. GB/T 5095.6 method 11d / EIA-364-32C | Temperature °C | Duration (Minutes) | 1 -55 | 30 | 2 +25 | 5Max. | 3 +85 | 30 | 4 +25 | 5Max. | 外观: 无损伤 (参照6.1.1) Appearance: No damage.(refer to 6.1.1) 接触电阻: 0.03Ω Max. Contact resistance: 0.03Ω Max. |
| Temperature °C | Duration (Minutes) | | | | | | | | | | | | |
| 1 -55 | 30 | | | | | | | | | | | | |
| 2 +25 | 5Max. | | | | | | | | | | | | |
| 3 +85 | 30 | | | | | | | | | | | | |
| 4 +25 | 5Max. | | | | | | | | | | | | |

| | | | | | |
|-----------------------|------------|--------------------|--------|-------------------|---|
| 产品名称 Product Name: | TJC1003 系列 | 编号 Document No. | PS3912 | 版本号 VersionNo. | 1 |
|-----------------------|------------|--------------------|--------|-------------------|---|



产品规格书

PRODUCT SPECIFICATION

| | | | |
|--------|--|---|---|
| 6.3.5 | 耐硫化氢腐蚀 H ₂ S Resistance | <p>遵循 JEIDA-38 标准, 连接器应承受以下条件测试:</p> <p>In accordance with JEIDA-38, mated connectors shall be subjected to the following condition.</p> <p>温度 Temperature: 40±2℃</p> <p>湿度 Humidity : 75%</p> <p>浓度 Gas concentration: 3±1 ppm</p> <p>时间 Duration : 240h</p> | <p>接触电阻: 0.03Ω Max.</p> <p>Contact resistance: 0.03Ω Max.</p> |
| 6.3.6 | 盐雾 Salt Spray | <p>把试验样品从试验箱顶悬挂下来, 采用浓度为(5±1)%(质量百分比)的氯化钠溶液, 在(35±2)℃温度下连续雾化 48h, 试验后用流动的蒸馏水轻轻洗去表面沉积物。在常温常湿条件下恢复 1~2h</p> <p>Forty-eight hours spray, at temp (35±2) °C, NaCl mist concentration (5±1)%. After test, wash parts and put it into room ambient for 1~2 hours</p> <p>GB/T 5095.6 Method 11f / EIA-364-26B</p> | <p>外观: 无损伤(五金件应无露出底金属的严重锈蚀; 使用预镀好的型材, 其落料面允许有不影响其性能的轻微腐蚀。)</p> <p>Appearance: No Damage (No erosion on material exposed. and plating material, slight erosion on the cutting surface is acceptable)</p> |
| 6.3.7 | 耐 NH ₃ 性 NH ₃ | <p>28%的氨水倒入干燥器中雾化, 然后将连接器放入蒸汽中:</p> <p>28% ammonia hydroxide solution shall be poured into a desiccator and mated connectors shall be subjected to the vapor under the following condition.</p> <p>槽内温度 Temperature: 25±2℃</p> <p>时间 Duration: 40min</p> | <p>外观: 无损伤</p> <p>Appearance: No Damage</p> <p>接触电阻: 0.03Ω Max.</p> <p>Contact resistance: 0.03Ω Max.</p> |
| 6.3.8 | 耐溶剂性 Resistance to solvent | <p>连接器应在下列条件下进行清洗, 参考第 11 页</p> <p>Connectors shall be cleansed under the following condition. Refer to page 11.</p> | <p>外观无异常, 无迹象</p> <p>No abnormality in appearance nor indication.</p> |
| 6.3.9 | 可焊性 Solder ability | <p>连接器应涂上助焊剂, 然后放入 230±5℃的焊锡中浸 3±1s.</p> <p>Connector shall be applied with flux. Then the connector shall be immersed in a solder bath of 230±5℃ for 3 +0/-1s.</p> <p>GB/T 5095.6 Method 12a / EIA-364-52</p> | <p>上锡率≥95%:</p> <p>Solder coverage: ≥95%</p> |
| 6.3.10 | 耐焊接热 Resistance to soldering heat | <p>把试验样品需要焊接的部位浸入焊锡炉中, 锡炉温度 (260±5)℃; 时间 (5±1) s 后, 在正常条件下恢复 1h。</p> <p>Dip solder tails into the molten solder (held at 260±5℃ for 5 ±1 sec.</p> <p>GB/T 5095.6 Method 12d / EIA-364-56A</p> <hr/> <p>铁温度 (350±5)℃; 手工焊接时间 (3±0.5) s。</p> <p>Solder Temperature: (350±5) °C</p> <p>Soldering Time: (3±0.5) s</p> <p>GB/T 5095.6 Method 12E / EIA-364-56A</p> | <p>端子应无松脱变形</p> <p>No loose contacts nor deformation</p> |

| | | | | | |
|-----------------------|------------|--------------------|--------|-------------------|---|
| 产品名称 Product Name: | TJC1003 系列 | 编号 Document No. | PS3912 | 版本号 VersionNo. | 1 |
|-----------------------|------------|--------------------|--------|-------------------|---|



产品规格书

PRODUCT SPECIFICATION

耐溶剂耐溶剂性试验条件 Test condition for resistance to solvent

溶剂 Solvent : PINE ALPHA ST 100S(ARAKAWA CHEMICAL INDUSTRIES,LTD.)

成份 Content:

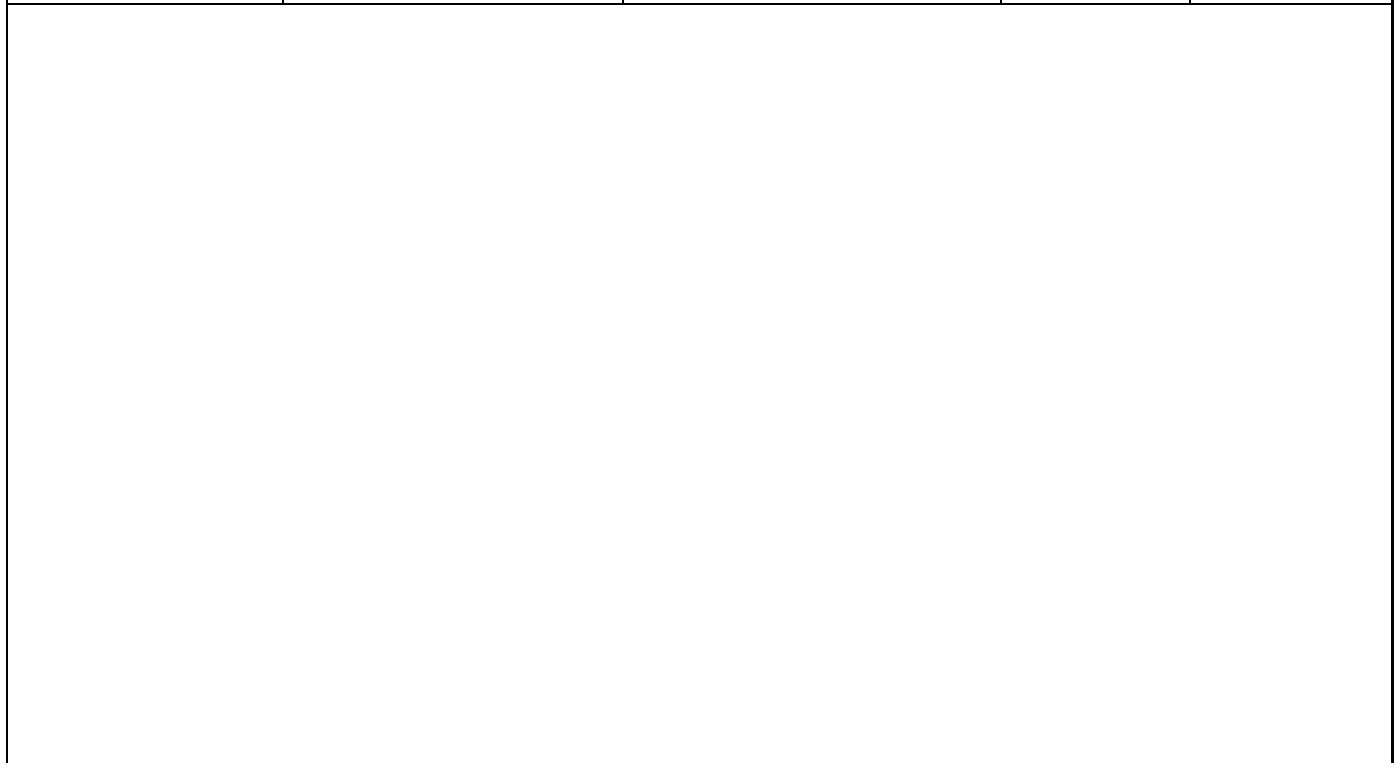
POLYETHYLENE-GLYCOL(Solvent classified as ALKYL-ETHER) -比率 Content ratio:80%

非离子表面活性物 NON-ION SYSTEM SURFACE-ACTIVE AGENT -比率 Content ratio:15%

纯净水 PURE WATER -比率 Content ratio:5%

清洗程序和条件 Clean process and condition

| | 清洁 CLEANSING | 洗涤 WASHING | 干燥 DRYING | |
|---------------------------------------|---|---|-----------------------------|-----------------|
| | | | 擦洗 WIPING | 干燥 DRYING |
| 方式 SYSTEM | 在高温带有超声波的液体池中 上下移动试样 Up and down movement in hot liquid with ultrasonic wave | 在常温带有超声波的液体池中上下 移动试样 Up and down movement with ultrasonic wave | 气刀 Air knife | 热风 Warm blow |
| 使用清洗剂 DETERGENT LIQUID MEDICINE | PINE ALPHA ST-100S | 异丙基乙醇 ISOPROPYL ALCOHOL | 工业气 INDUSTRIAL AIR | |
| 温度 TEMPERATURE | 60℃ | 常温 Normal temperature | 常温 Normal temperature | 85℃ |
| 时间 TIME | 60s | 120s | 60s | 10min |



| | | | | | |
|-----------------------|------------|--------------------|--------|-------------------|---|
| 产品名称 Product Name: | TJC1003 系列 | 编号 Document No. | PS3912 | 版本号 VersionNo. | 1 |
|-----------------------|------------|--------------------|--------|-------------------|---|



产品规格书

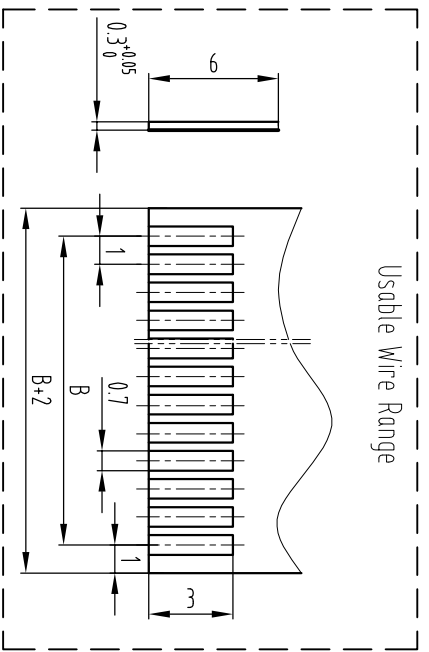
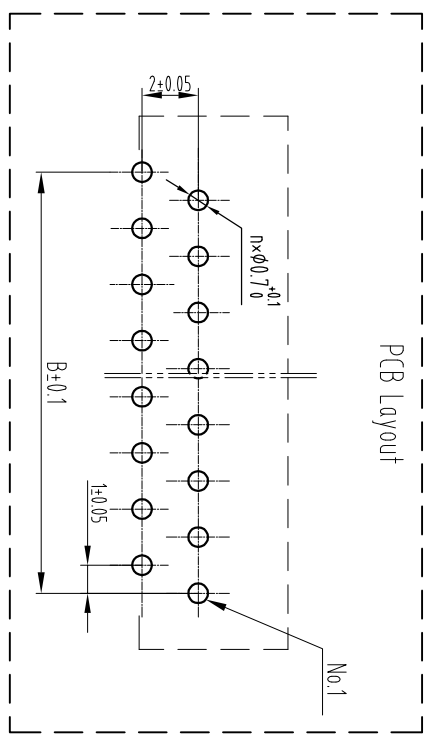
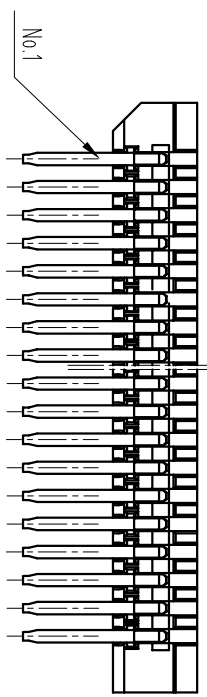
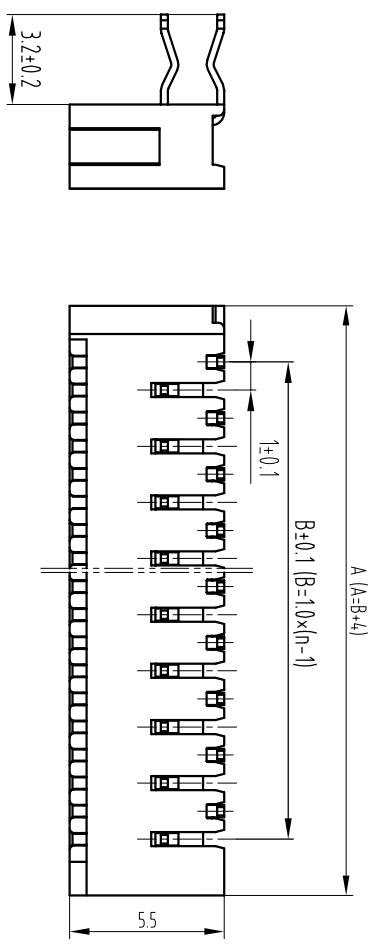
PRODUCT SPECIFICATION

7. 测试分组 Test Sequences (Samples: 5PCS)

| 测试组 GROUP NUMBER | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q |
|---|---|---|-----|---|-----|---|---|-----|-----|-----|-----|-----|-----|-----|---|---|---|
| 外观 Appearance | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 插针固定力 Retention Force of terminal | 2 | | | | | | | | | | | | | | | | |
| FPC/FFC 插拔力 FPC/FFC insertion & separation force | | 2 | | | | | | | | | | | | | | | |
| 机械振动 Random Vibration | | | 3 | | | | | | | | | | | | | | |
| 机械冲击 Shock | | | | 2 | | | | | | | | | | | | | |
| 机械寿命 Durability | | | | | 3 | | | | | | | | | | | | |
| 接触电阻 Contact Resistance | | 3 | 2,4 | | 2,4 | | | 2,4 | 2,4 | 2,4 | 2,4 | 2,4 | 2,4 | 2,4 | | | |
| 绝缘电阻 Insulation Resistance | | | | | | 2 | | | | 5 | | | | | | | |
| 耐电压 Withstand Voltage | | | | | | 3 | | | | 6 | | | | | | | |
| 温升 Temperature Rise | | | | | | | 2 | | | | | | | | | | |
| 耐高温 Heat Resistance | | | | | | | | 3 | | | | | | | | | |
| 耐低温 Cold Resistance | | | | | | | | | 3 | | | | | | | | |
| 恒定湿热 Humidity | | | | | | | | | | 3 | | | | | | | |
| 温度循环 Temperature Cycling | | | | | | | | | | | 3 | | | | | | |
| 耐硫化氢腐蚀 H ₂ S Resistance | | | | | | | | | | | | 3 | | | | | |
| 盐雾 Salt Spray | | | | | | | | | | | | | 3 | | | | |
| 耐 NH ₃ 性 H ₂ S Resistance | | | | | | | | | | | | | | 3 | | | |
| 耐溶剂性 Resistance to solvent | | | | | | | | | | | | | | | 2 | | |
| 可焊性 Solder ability | | | | | | | | | | | | | | | | 2 | |
| 耐焊接热 Resistance to soldering heat | | | | | | | | | | | | | | | | | 2 |

| | | | | | |
|-----------------------|------------|--------------------|--------|-------------------|---|
| 产品名称 Product Name: | TJC1003 系列 | 编号 Document No. | PS3912 | 版本号 VersionNo. | 1 |
|-----------------------|------------|--------------------|--------|-------------------|---|

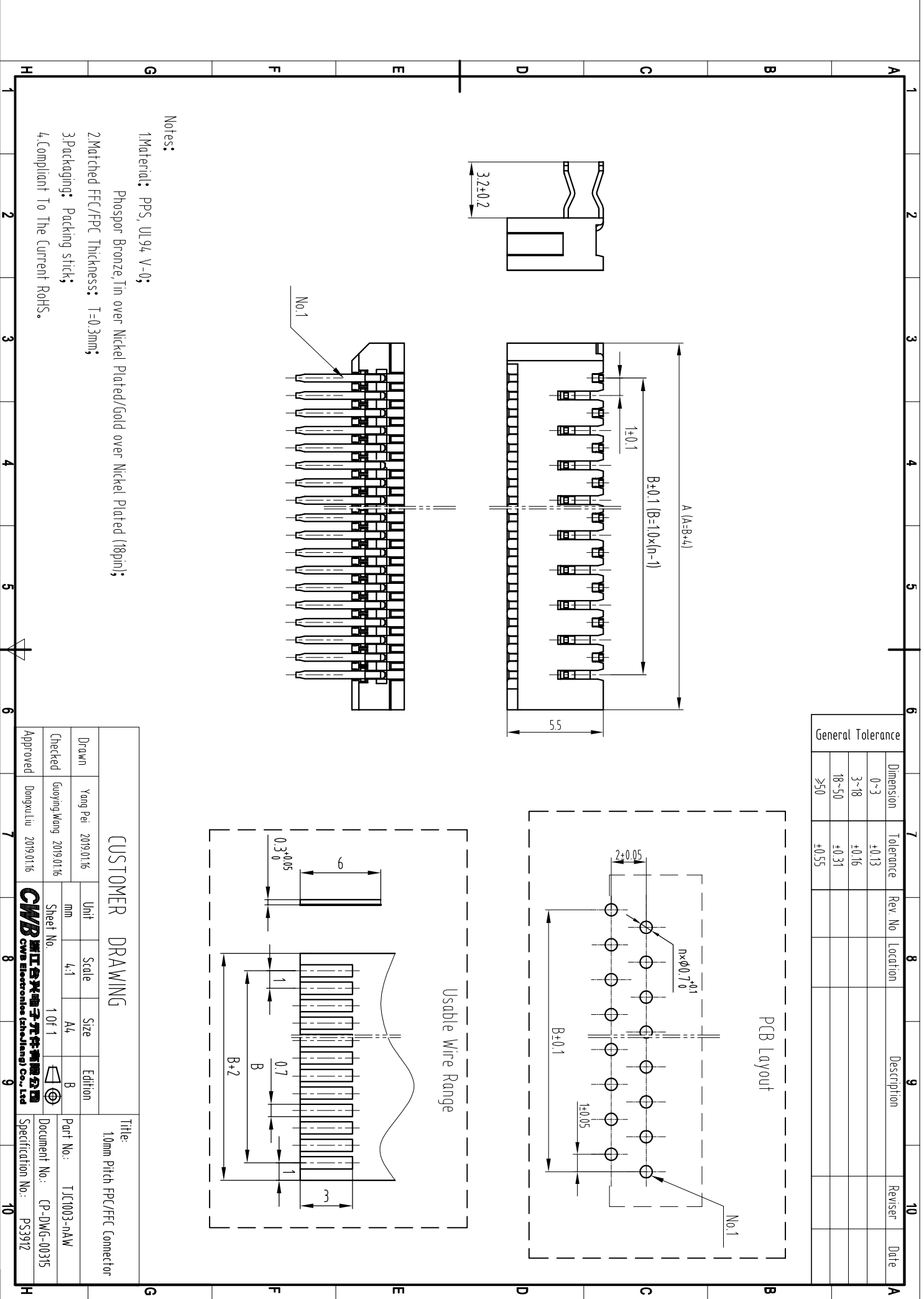
| General Tolerance | | Dimension | Tolerance | Rev. No | Location | Description | Reviser | Date |
|-------------------|-------|-----------|-----------|---------|----------|-------------|---------|------|
| | 0~3 | ±0.13 | | | | | | |
| | 3~18 | ±0.16 | | | | | | |
| | 18~50 | ±0.31 | | | | | | |
| | ≥50 | ±0.55 | | | | | | |



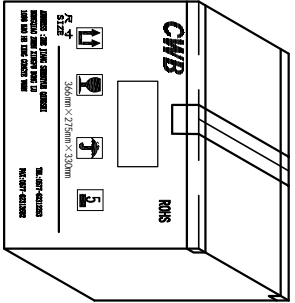
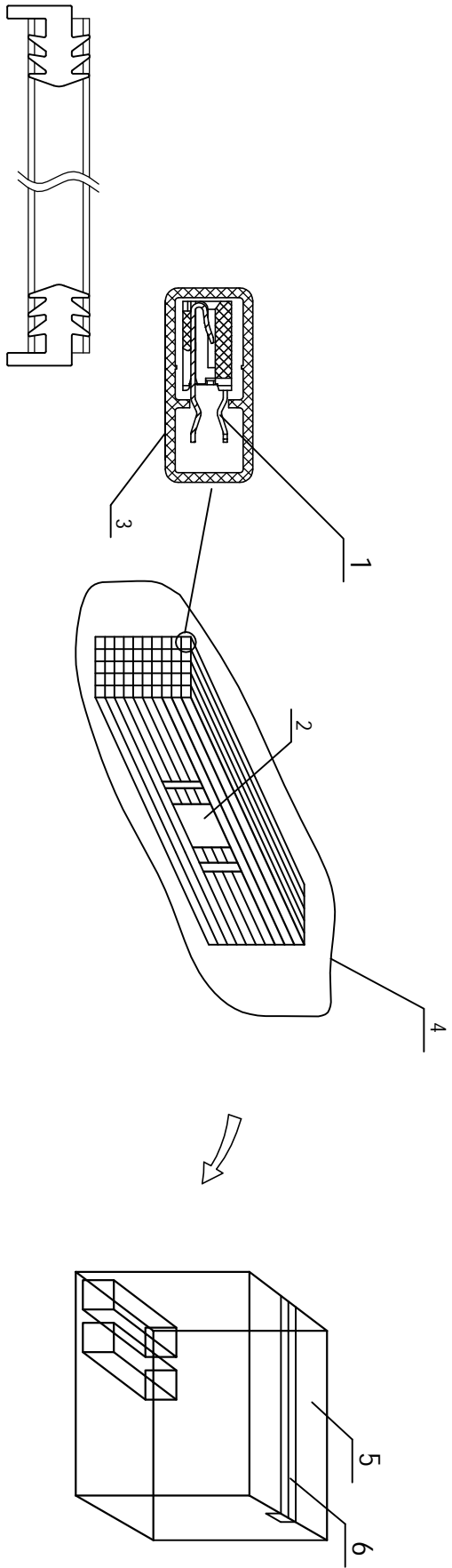
Notes:

- 1.Material: PPS, UL94 V-0;
- Phospor Bronze, Tin over Nickel Plated/Gold over Nickel Plated (18pin);
- 2.Matched FFC/FFC Thickness: T=0.3mm;
- 3.Packaging: Packing stick;
- 4.Compliant To The Current RoHS.

| | | | | | |
|------------------|--------------|------------|---------------------------|-------------------------------------|--------------|
| CUSTOMER DRAWING | | | | Title: 10mm Pitch FFC/FFC Connector | |
| Drawn | Yang Pei | 2019.01.16 | Unit | mm | Scale |
| Checked | Guoying Wang | 2019.01.16 | Sheet No. | 1 OF 1 | Edition |
| Approved | Dongxuliu | 2019.01.16 | Part No. | TJC1003-NAW | Document No. |
| | | | Specification No.: PS3912 | | |



| General Tolerance | | Dimension | Tolerance | Rev. No | Location | Description | Reviser | Date |
|-------------------|-------|-----------|-----------|---------|----------|-------------|---------|------|
| | 0~3 | ±0.13 | | | | | | |
| | 3~18 | ±0.16 | | | | | | |
| | 18~50 | ±0.31 | | | | | | |
| | ≥50 | ±0.55 | | | | | | |



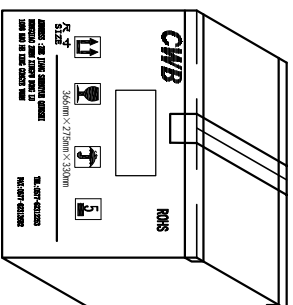
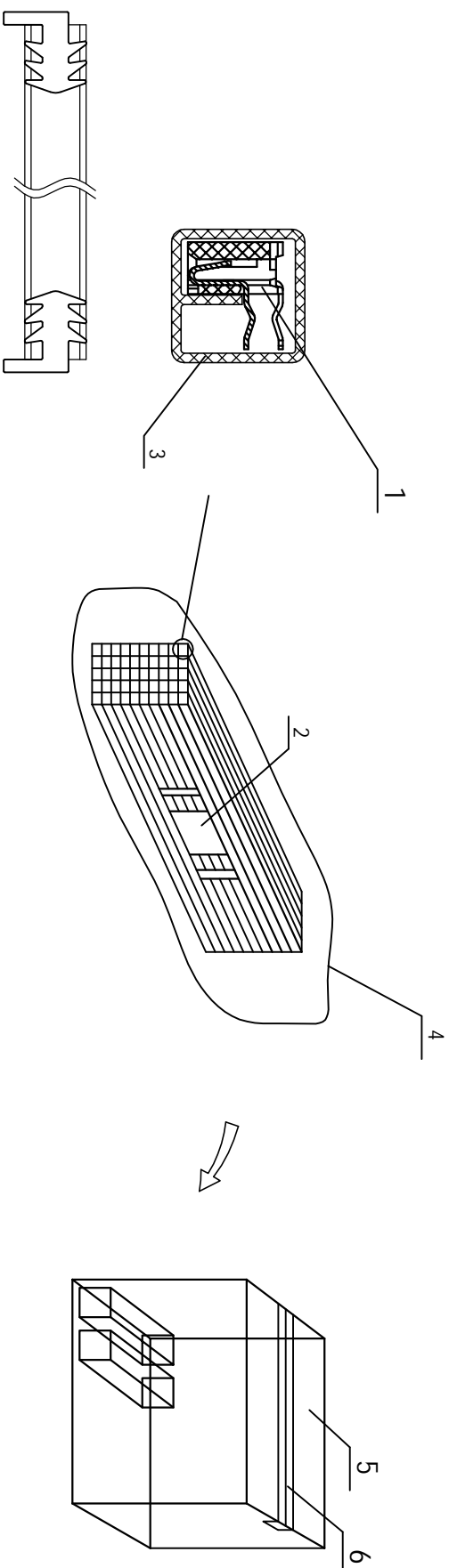
| Number | Designation | Remarks | Part No. | Pcs/Tube | Pcs/Bag | Pcs/Box | Part No. | Pcs/Tube | Pcs/Bag | Pcs/Box |
|--------|--------------|---------|-------------|----------|---------|---------|-------------|----------|---------|---------|
| 1 | TJC1003-nA | | TJC1003-3A | 55pcs | 2750pcs | 55pcs | TJC1003-17A | 16pcs | 800pcs | 16pcs |
| 2 | Certificate | | TJC1003-4A | 47pcs | 2350pcs | 47pcs | TJC1003-18A | 15pcs | 750pcs | 15pcs |
| 3 | Packing Tube | | TJC1003-5A | 40pcs | 2000pcs | 40pcs | TJC1003-19A | 15pcs | 750pcs | 15pcs |
| 4 | Packing Bag | | TJC1003-6A | 36pcs | 1800pcs | 36pcs | TJC1003-20A | 14pcs | 700pcs | 14pcs |
| 5 | Packing Box | | TJC1003-7A | 33pcs | 1650pcs | 33pcs | TJC1003-21A | 13pcs | 650pcs | 13pcs |
| 6 | Gummed Tape | | TJC1003-8A | 30pcs | 1500pcs | 30pcs | TJC1003-22A | 13pcs | 650pcs | 13pcs |
| | | | TJC1003-9A | 27pcs | 1350pcs | 27pcs | TJC1003-23A | 12pcs | 600pcs | 12pcs |
| | | | TJC1003-10A | 25pcs | 1250pcs | 25pcs | TJC1003-24A | 12pcs | 600pcs | 12pcs |
| | | | TJC1003-11A | 23pcs | 1150pcs | 23pcs | TJC1003-25A | 11pcs | 550pcs | 11pcs |
| | | | TJC1003-12A | 21pcs | 1050pcs | 21pcs | TJC1003-26A | 11pcs | 550pcs | 11pcs |
| | | | TJC1003-13A | 20pcs | 1000pcs | 20pcs | TJC1003-27A | 11pcs | 550pcs | 11pcs |
| | | | TJC1003-14A | 19pcs | 950pcs | 19pcs | TJC1003-28A | 10pcs | 500pcs | 10pcs |
| | | | TJC1003-15A | 18pcs | 900pcs | 18pcs | TJC1003-29A | 10pcs | 500pcs | 10pcs |
| | | | TJC1003-16A | 17pcs | 850pcs | 17pcs | TJC1003-30A | 9pcs | 450pcs | 9pcs |

CUSTOMER DRAWING

Title: Packaging Specification of 10mm Pitch PVC/FFC Header

| | | | | | | | | | | | | |
|----------|--------------|------------|------------------|--------|-------------------------------------|---|------|----|---------|---|--------------------|--------------|
| Drawn | Yang Pei | 2019.01.16 | Unit | mm | Scale | / | Size | A4 | Edition | B | Part No.: | TJC1003-nA |
| Checked | Guoying Wang | 2019.01.16 | Sheet No. | 1 OF 1 | | | | | | | Document No.: | BZ-DWG-00176 |
| Approved | Dongxuliu | 2019.01.16 | CWB 瑞立合兴电子元件有限公司 | | CWB Electronics (Shenzhen) Co., Ltd | | | | | | Specification No.: | P33912 |

| Dimension | Tolerance | Rev. No | Location | Description | Reviser | Date |
|-----------|-----------|---------|----------|-------------|---------|------|
| 0~3 | ±0.13 | | | | | |
| 3~18 | ±0.16 | | | | | |
| 18~50 | ±0.31 | | | | | |
| ≥50 | ±0.55 | | | | | |



| Number | Designation | Remarks | Part No. | Pcs/Tube | Pcs/Bag | Pcs/Box | Part No. | Pcs/Tube | Pcs/Bag | Pcs/Box |
|--------|--------------|---------|--------------|----------|---------|---------|--------------|----------|---------|---------|
| 1 | TJC1003-nA | | TJC1003-3AW | 55pcs | 2750pcs | 55pcs | TJC1003-17AW | 16pcs | 800pcs | 16pcs |
| 2 | Certificate | | TJC1003-4AW | 47pcs | 2350pcs | 47pcs | TJC1003-18AW | 15pcs | 750pcs | 15pcs |
| 3 | Packing Tube | | TJC1003-5AW | 40pcs | 2000pcs | 40pcs | TJC1003-19AW | 15pcs | 750pcs | 15pcs |
| 4 | Packing Bag | | TJC1003-6AW | 36pcs | 1800pcs | 36pcs | TJC1003-20AW | 14pcs | 700pcs | 14pcs |
| 5 | Packing Box | | TJC1003-7AW | 33pcs | 1650pcs | 33pcs | TJC1003-21AW | 13pcs | 650pcs | 13pcs |
| 6 | Gummed Tape | | TJC1003-8AW | 30pcs | 1500pcs | 30pcs | TJC1003-22AW | 13pcs | 650pcs | 13pcs |
| | | | TJC1003-9AW | 27pcs | 1350pcs | 27pcs | TJC1003-23AW | 12pcs | 600pcs | 12pcs |
| | | | TJC1003-10AW | 25pcs | 1250pcs | 25pcs | TJC1003-24AW | 12pcs | 600pcs | 12pcs |
| | | | TJC1003-11AW | 23pcs | 1150pcs | 23pcs | TJC1003-25AW | 11pcs | 550pcs | 11pcs |
| | | | TJC1003-12AW | 21pcs | 1050pcs | 21pcs | TJC1003-26AW | 11pcs | 550pcs | 11pcs |
| | | | TJC1003-13AW | 20pcs | 1000pcs | 20pcs | TJC1003-27AW | 11pcs | 550pcs | 11pcs |
| | | | TJC1003-14AW | 19pcs | 950pcs | 19pcs | TJC1003-28AW | 10pcs | 500pcs | 10pcs |
| | | | TJC1003-15AW | 18pcs | 900pcs | 18pcs | TJC1003-29AW | 10pcs | 500pcs | 10pcs |
| | | | TJC1003-16AW | 17pcs | 850pcs | 17pcs | TJC1003-30AW | 10pcs | 450pcs | 9pcs |

CUSTOMER DRAWING

Title: Packaging Specification of 1mm Pitch PVC/FFC Header

| | | | | | | | | | | | | |
|----------|--------------|------------|----------------|--------|-------------------------------------|---|------|----|---------|---|--------------------|--------------|
| Drawn | Yang Pei | 2019.01.16 | Unit | mm | Scale | / | Size | A4 | Edition | B | Part No.: | TJC1003-nAW |
| Checked | Guoying Wang | 2019.01.16 | Sheet No. | 1 OF 1 | | | | | | | Document No.: | BZ-DWG-00177 |
| Approved | Dongxuliu | 2019.01.16 | CWB 浙江台兴电子有限公司 | | CWB Electronics (Zhejiang) Co., Ltd | | | | | | Specification No.: | P53912 |