



产品规格书

PRODUCT SPECIFICATION

产品描述: TJC79203 Connector

Product Description: TJC79203 Connector

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 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.	制定 Edit: 杨培 2019.01.19	产品名称 Product Name: TJC79203
	审核 Check: 王国英 2019.01.19	编号 Document No.: PS3426
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 2019.01.19	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	日期 Date
1	1	/	换新版发行	2019.01.19
2				
3				
4				
5				
6				

产品名称 Product Name:	TJC79203	编号 Document No.	PS3426	版本号 VersionNo.	1
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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 CTB 7.92P 阴型 & 阳型电子连接器，产品名称：TJC79203-2Y。

This product specification covers the requirement for Cable to Board 2.5mm pitch Receptacle & Plug connector, which is designed and manufactured by CWB Electronics(ZheJiang) Co.,LTD. P/N: TJC79203-2Y

3. 产品描述 Product Description

TJC79203 系列产品为家电连接器产品，产品部件组成如下：

The TJC79203 series connector designed for home appliances connection. Part checklist as following form:

Name	Part name	Notes
条形连接器孔座 Housing	TJC79203	PA UL94V-0
插簧 Contact	TJC79203 插簧	Phosphor bronze Tin 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.

5. 参数范围 Parameter Ratings:

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额定电流 Rated Current	7A
额定电压 Rated Voltage	250V [AC(有效值 rms)/DC]
使用温度范围 Operating temperature range	-40°C ~ +105°C (Include temperature rise)
适用线型 Applicable wires	Wire Size: AWG18~AWG16 (0.823mm ² -1.31mm ²) Insulation Diameter: 2.1mm-2.3mm

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 eye 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	1. 塑料件表面应无明显疤痕、凹陷、开裂及影响使用的变形。 Plastic part: smooth and flat surface without discolor, broken, crack, and distortion, etc. 2. 金属件表面无锈蚀、氧化、无明显的机械损伤及电镀层脱落等缺陷。 Metal part: bright and even surface without rust, oxide, fog and obvious physical damage, etc.	
6.1.2	端子的插入力 与固定力 Insertion force and Retention Force for Contact	固定连接器和测力计, 在连接器轴线方向插入和拔出; 速度不大于 25 mm/min. Axial Insert and withdraw force on the contact in the housing at a rate less than 25 mm/min. GB/T 5095.8 Method 15d / EIA-364-29B	插入力 (Insertion) MAX.	固定力 Retention MIN.
			15N	20N
6.1.3	插簧与插针的 插拔力 Insertion and Withdrawal Force for Pin in the Contact	固定连接器和测力计, 在连接器轴线方向插入和拔出; 速度不大于 25 mm/min. Axial Insert and withdraw force on the pin contact in the socket contact at a rate less than 25 mm/min. GB/T 5095.8 Method 16e / EIA-364-13B	插入力 (Insertion) Max.	固定力(Retention) Min.
			5N	1N

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6.1.4	压着部位抗张强度 Crimping Pull Out Force	在试验装置夹头中固定试验样品，在连接的轴线方向施加张力;速度不大于 25mm/min. Fix the crimped contact, Axial pull out force on the contact in the housing at a rate less than 25 mm/min. GB/T5095.8 Method 16d / EIA-364-08B 	AWG 16:80N Min. AWG 18: 70N Min.
6.1.5	锁扣强度 Lock Strength	固定连接器（仅塑件）和测力计，在轴线方向将其拔出；速度不大于 25 mm/min。 Mated connector (Only for plastic part), apply axial pullout force at the speed rate of 25mm/min 	35N Min
6.1.6	机械振动 Random Vibration	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。 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. Frequency: (10~55~10) HZ/min. Amplitude: 1.52mm GB/T 5095.4 Method 6d / EIA-364-28D	外观：无损伤（参照6.1.1） Appearance: No damage.(refer to 6.1.1) 接触电阻：0.02Ω Max. Contact resistance: 0.02Ω Max. 中断：1μsec Max. <1μsec discontinuity
6.1.7	机械冲击 Shock	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。 冲击强度：490m/s ² 持续时间：11ms Mated connectors and subject to the following shock conditions, 3times 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) Test Pulse: Half Sine Peak Value: 490m/s ² Duration: 11ms GB/T 5095.4 Method 6c / EIA-364-27B	外观：无损伤（参照6.1.1） Appearance: No damage.(refer to 6.1.1) 中断：1μsec Max. <1μsec discontinuity
6.1.8	机械寿命 Durability	以每分钟 10 次的速度插拔 50 次。 50 cycles mating and unmating test at the speed 10 cycles per minute GB/T 5095.5 Method 9a / EIA-364-09C	外观：无损伤（参照6.1.1） Appearance: No damage.(refer to 6.1.1) 接触电阻：0.02Ω Max. Contact resistance: 0.02Ω Max.

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	插配阴阳连接器后,用小功率电路进行测试 Mated connectors with dry circuit to test Contact Resistance GB/T 5095.2 Method 2a / EIA-364-23B	0.01 Ω Max. (Initial) 0.02 Ω Max. (Final)

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6.2.2	绝缘电阻 Insulation Resistance	在相邻接触件之间或地线之间,用 500V DC 电压进行测试. Apply a voltage of 500V DC between adjacent terminals and between terminals to ground. GB/T 5095.2 Method 3a / EIA-364-21C	1000 MΩ Min. (Initial) 500 MΩ Min. (Final)
6.2.3	耐电压 Withstand Voltage	相邻接触件之间或地线之间施加 1500V AC (有效值),漏电流 1mA 的电压作用,时间 1min. Apply a voltage of AC 1500V for 1 minute between adjacent contacts and between contacts to ground. GB/T 5095.2 Method 4a / EIA-364-20B	外观: 无击穿和飞弧现象 Appearance: No Breakdown or flashover
6.2.4	温升 Temperature Rise	插合连接器, 通以最大允许电流, 测温度的差值 Mated connectors and measure the temperature rise of contact when the maximum AC rated current is passed. GB/T 5095.3 Method 5a / EIA-364-70A	Δ30℃ Max.(Δ30K Max)

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 105±2℃ for 96 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: 0.02Ω Max. Contact resistance: 0.02Ω Max. 绝缘电阻: 500 MΩ Min. Insulation Resistance : 500 MΩ Min. 耐电压: 无击穿和飞弧现象. Withstand Voltage: No Breakdown or flashover.
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: 0.02Ω Max. Contact resistance: 0.02Ω Max.
6.3.3	恒定湿热 Humidity	温度 40±2℃, 相对湿度(90~95)% 搁置时间 240h, 取出恢复 1~2h 后检查. Mated connectors exposed to the condition of 40±2℃ (90~95)% Humidity for 240 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: 0.02Ω Max. Contact resistance: 0.02Ω Max. 绝缘电阻: 500 MΩ Min. Insulation Resistance : 500 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+25℃常温条件下放置不超过 5min, c) 在(85±2)℃的恒温条件下放置 0.5h; d) 在+25℃常温条件下放置不超过 5min, 从 a)到 d)为一个循环周期, 共进行 25 个循环,恢复 1~2h 后检查. Mated connectors shall be tested under the following conditions Temperature °C Duration (Minutes) a -55 30	外观: 无损伤 (参照6.1.1) Appearance: No damage.(refer to 6.1.1) 接触电阻: 0.02Ω Max. Contact resistance: 0.02Ω Max. 绝缘电阻: 500 MΩ Min. Insulation Resistance : 500 MΩ Min. 耐电压: 无击穿和飞弧现象. Withstand Voltage: No Breakdown or flashover.

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		b +25 5Max. c +85 30 d +25 5Max. Step a to d is one cycle, 25 cycles shall be tested. Recovery time 1~2 hours. GB/T 5095.6 method 11d / EIA-364-32C	
6.3.5	盐雾 Salt Spray	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 48 hours spray, at temp (35±2)℃, Salt NaCl mist (5±1)% After test wash parts and return to room ambient for 1~2h hours GB/T 5095.6 Method 11f /EIA-364-26B	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。) Appearance: No Damage (No erosion with material exposed. And with plating material, slight erosion on the cutting surface is acceptable) 接触电阻：0.02Ω Max. Contact resistance: 0.02Ω Max.
6.3.6	可焊性 Solderability	把试验样品需要焊接的部位浸入焊锡炉中，锡炉温度(245±5)℃，时间(4~5)s Dip solder tails into the molten solder (held at (245±5) °C for (4~5) sec. GB/T 5095.6 Method 12a / EIA-364-52	上锡率≥95%： Solder coverage: ≥95%

产品名称 Product Name:	TJC79203	编号 Document No.	PS3426	版本号 VersionNo.	1
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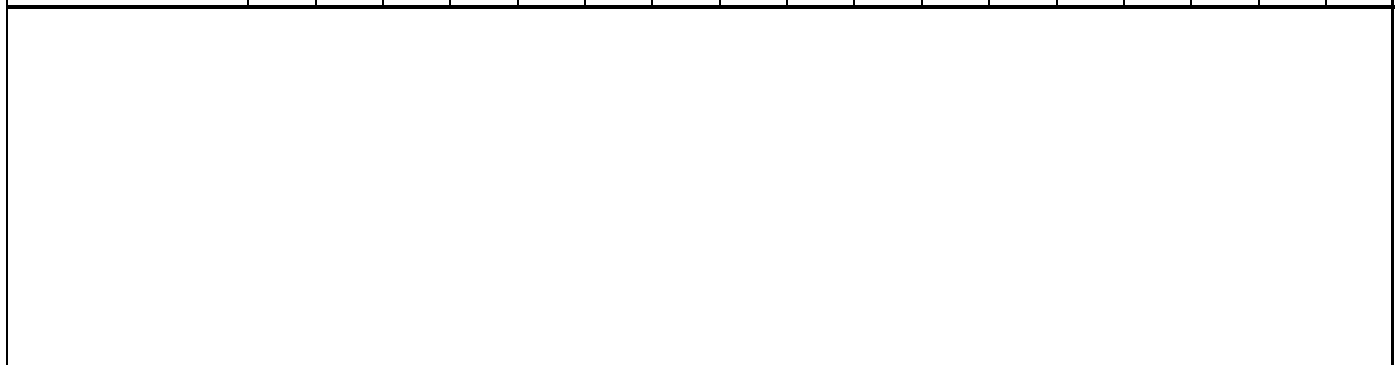


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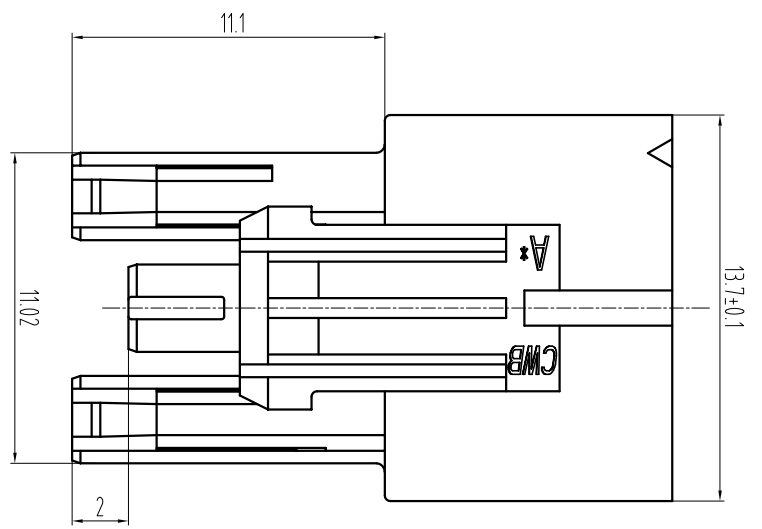
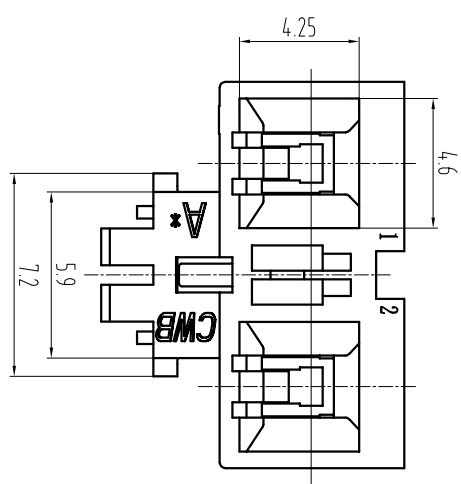
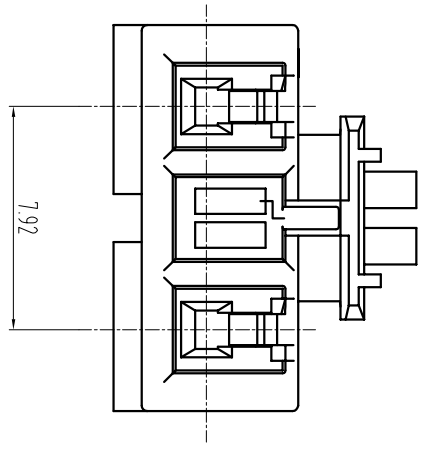
7. 测试分组 Test Sequences (Samples: 5PCS)

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	1,5	1,3	1,7	1	1,7	1,5	1,7	1,7	1,5	1,3	1,3
端子的插入力与固定力 Insertion force and Retention Force for Contact	2																
插簧与插针的插拔力 Insertion and Withdrawal Force for Pin in the Contact		2															
压着部位抗张强度 Crimping Pull Out Force				2													
锁扣强度 Lock Strength					2												
机械振动 Random Vibration							3										
机械冲击 Shock								2									
机械寿命 Durability									5								
接触电阻 Contact Resistance							2,4		2,6		2,4	2,4	2,4	2,4	2,4		
绝缘电阻 Insulation Resistance									3		5		5	5			
耐电压 Withstand Voltage									4		6		6	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			
盐雾 Salt Spray															3		
可焊性 Solderability																2	




产品名称 Product Name:	TJC79203	编号 Document No.	PS3426	版本号 VersionNo.	1
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Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
0~3	±0.13					
3~18	±0.16					
18~50	±0.31					
≥50	±0.55					

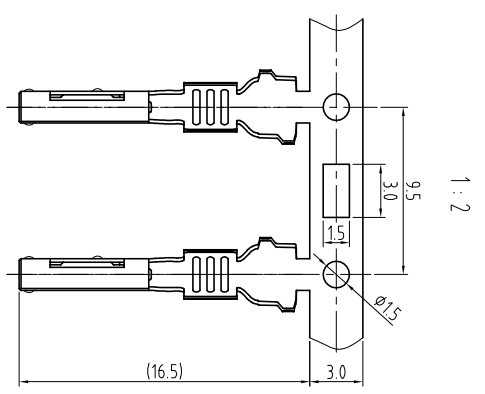
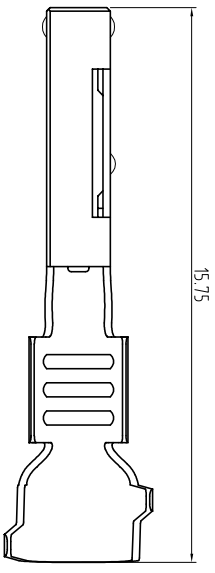
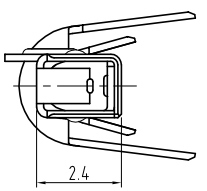
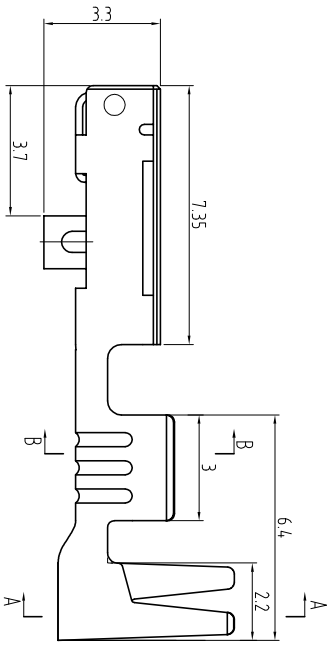
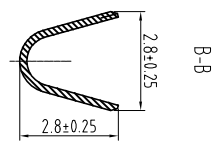
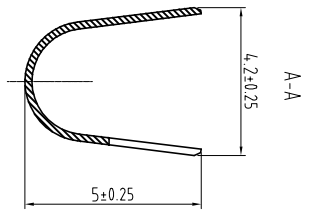
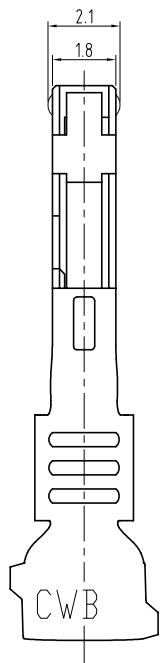


- Notes:
- 1.Material: PA UL94 V-0;
 - 2.Matched Socket Contact: TJC79203;
 - 3.Packaging: Packing bag;
 - 4.Compliant To The Current RoHS.

CUSTOMER DRAWING

Drawn	Yang Pei	2019.01.15	Unit	mm	Scale	1 : 1	Size	A4	Edition	B0	Title:	7.92mm Pitch Receptacle Housing
Checked	Suo yingwang	2019.01.15	Sheet No.			1 of 1					Part No.:	TJC79203-2Y
Approved	Liu dongxu	2019.01.15	 CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd								Document No.:	CP-DWG-00783
											Specification No.:	PS3426

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: Phosphor bronze, Thickness=0.20mm;
2. Surface Finish: Tin Plating;
3. Matched Receptacle Housing: TJC3969-2Y;
4. Applicable Wires: AWG16#~AWG18#;
5. Compliant To The Current RoHS.

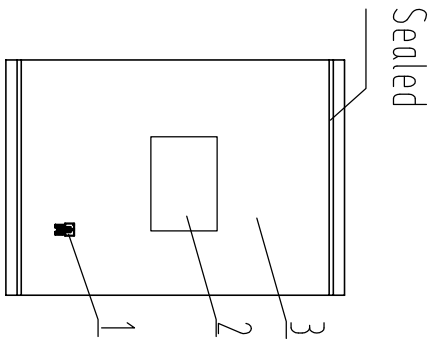
CUSTOMER DRAWING

Title: 7.92mm Pitch Socket Contact

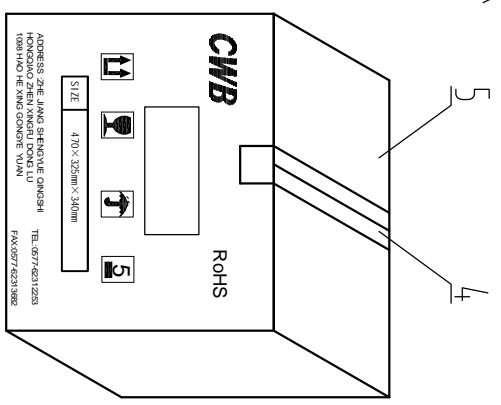
Drawn	Yang Pei	2019.01.16	Unit	mm	Scale	1 : 1	Size	A4	Edition	B0	Part No.:	TJC79203
Checked	Guo yingwang	2019.01.16	Sheet No.	1 OF 1							Document No.:	CP-DWG-00784
Approved	Liu dongxu	2019.01.26	CWB 浙江谷光电子元件有限公司		CWB Electronics (Zhejiang) Co., Ltd		Specification No.:		PS3426			

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

Packing bag



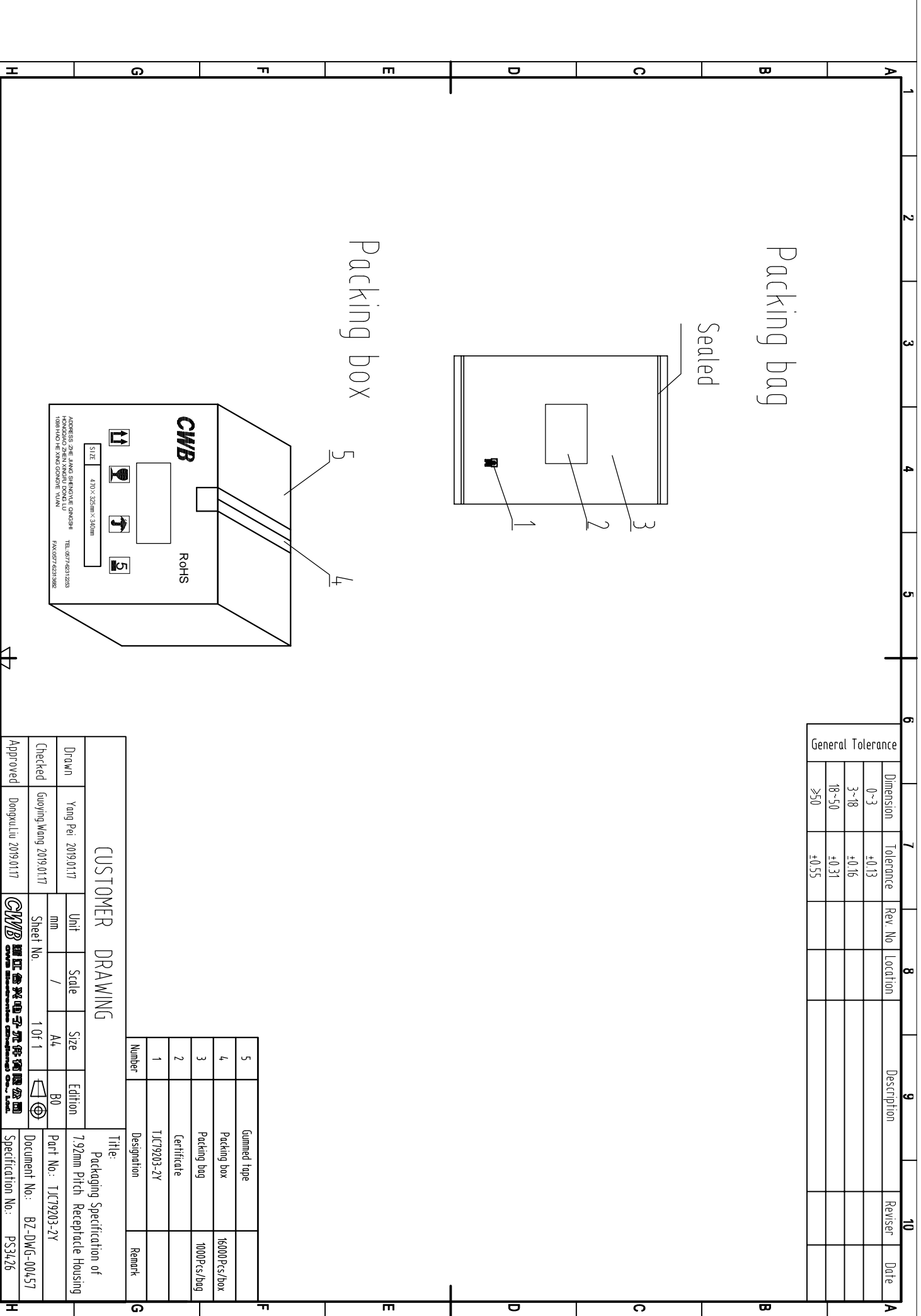
Packing box



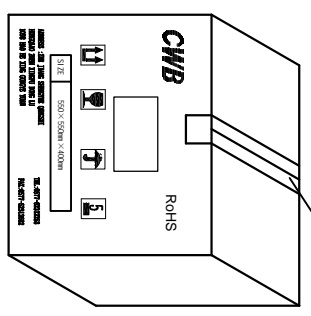
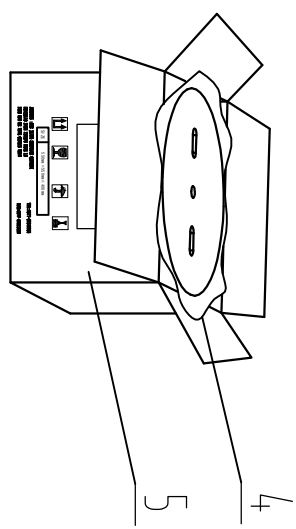
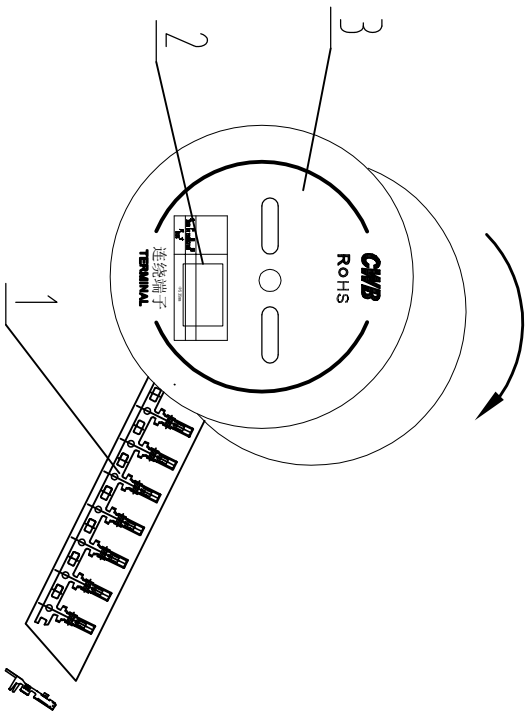
Number	Designation	Remark
1	TJC79203-2Y	
2	Certificate	
3	Packing bag	16000Pcs/box
4	Packing box	16000Pcs/box
5	Gummed tape	

CUSTOMER DRAWING

Title: Packaging Specification of 7.92mm Pitch Receptacle Housing	
Drawn	Yang Pei 2019.01.17
Checked	Guoying Wang 2019.01.17
Approved	Dongxuliu 2019.01.17
Unit	mm
Scale	/
Size	A4
Edition	B0
Sheet No.	1 of 1
Part No.:	TJC79203-2Y
Document No.:	BZ-DWG-00457
Specification No.:	PS3426



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
1	TJC2509 Contact	
2	Certificate	
3	Packing Reel	3500PCS/disc
4	Packing bag	38500PCS/bag
5	Packing box	38500PCS/box
6	Gummed tape	

CUSTOMER DRAWING

Title: Packaging Specification of 7.92mm Pitch Socket Contact	
Drawn	Yang Pei 2019.01.15
Checked	Guo yingwang 2019.01.15
Approved	Liu dongxu 2019.01.15
Unit	mm
Scale	/
Size	A4
Edition	B0
Sheet No.	1 OF 1
Part No.	TJC79203
Document No.	BZ-DWG-00458
Specification No.	PS3426

A 1 2 3 4 5 6 7 8 9 10

H 1 2 3 4 5 6 7 8 9 10

G F E D C B A