



产品规格书

PRODUCT SPECIFICATION

产品描述: TJC5010 系列连接器

Product Description: TJC5010 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: 杨晓勇 2016.4.25	产品名称 Product Name: TJC5010 系列连接器
	审核 Check: 王国英 2019.1.15	编号 Document No.: PS1849
	批准 Approval: 刘冬旭 2019.1.15	版本 REVISION: 2
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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	旧版规格书	整理为新版规格书，版本升级	2016.4.25
2	2	/	更改图纸商标 LOGO	王彦飞 2019.1.15
3				
4				
5				

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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 5.0P 阳型电子连接器**，产品名称：**TJC5010**。

This product specification covers the requirement for **Cable to Board 5.0 mm pitch Plug connector**, which is designed and manufactured by CWB Electronics(ZheJiang) Co.,LTD. P/N: **TJC5010**.

3. 产品描述 Product Description

TJC5010 系列产品为家电连接器产品，产品部件组成如下：

The TJC5010 series connector designed for home appliances connection. Part checklist as following form:

Name	Part name	Notes
阳连接器 Header	TJC5010-2A	Wafer:PA66 UL94V-0/PC UL94V-0 Post: Brass, tin over nickel plating

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

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5.参数范围 Parameter Ratings:

额定电流 Rated Current	7A
适用 PCB 板 Applicable P.C.B	Board Thickness: 1.6mm Hole Diameter: 1.65mm-1.75mm
额定电压 Rated Voltage	250V [AC(有效值 rms)/DC]
使用温度范围 Operating temperature range	-25℃~+85℃

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	针的固定力 Retention Force for Pin	固定连接器/或测力计, 在连接器轴线方向施加规定的推力进行测试, 速度不大于 25mm/min。 Apply thrust force on the Pin in the wafer at a rate of 25 mm/min . GB/T 5095.8 Method 15a / EIA-364-29B	25N Min

6.2 环境性能 Environmental

序号 No.	项 目 Item	测试条件 Test Condition	规 格 Requirement
6.2.1	耐高温 Heat Resistance	把试验样品于 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 Make samples be 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)
6.2.2	耐低温 Cold Resistance	把试验样品置于 -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 Make samples be 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)

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6.2.3	恒定湿热 Humidity	温度 $40\pm 2^{\circ}\text{C}$, 相对湿度($90\sim 95$)% 搁置时间 96h , 取出恢复 $1\sim 2\text{h}$ 后检查。 Make samples be exposed to the condition of $40\pm 2^{\circ}\text{C}$ ($90\sim 95$) % Humidity for 96 hours. Recovery time $1\sim 2$ 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)
6.2.4	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) $^{\circ}\text{C}$ 的恒温条件下放置 0.5h ; b) 在(85 ± 2) $^{\circ}\text{C}$ 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 $1\sim 2\text{h}$ 后检查。 Make samples shall be tested under the following conditions Temperature $^{\circ}\text{C}$ Duration (Minutes) 1 -55 30 2 $+25$ 5Max. 3 $+85$ 30 4 $+25$ 5Max. Step 1 to 4 is one cycle, 5 cycles shall be tested. Recovery time $1\sim 2$ hours. GB/T 5095.6 method 11d / EIA-364-32C	外观: 无损伤 (参照6.1.1) Appearance: No damage.(refer to 6.1.1)
6.2.5	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) $^{\circ}\text{C}$ 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 $1\sim 2\text{h}$ 48 hours spray, at temp (35 ± 2) $^{\circ}\text{C}$, Salt NaCl mist (5 ± 1)% After test wash parts and return to room ambient for $1\sim 2$ 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)
6.2.6	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 (240 ± 5) $^{\circ}\text{C}$, 时间(2 ± 0.5)s Dip solder tails into the molten solder (held at (240 ± 5) $^{\circ}\text{C}$ for (2 ± 0.5) sec. GB/T 5095.6 Method 12a / EIA-364-52	上锡率 $\geq 90\%$: Solder coverage: $\geq 90\%$
6.2.7	耐焊接热 Resistance to Soldering Heat	把试验样品需要焊接的部位浸入焊锡炉中,锡炉温度 (260 ± 5) $^{\circ}\text{C}$; 时间 (5 ± 1) s 后, 在正常条件下恢复 $1\sim 2\text{h}$ 。 Dip solder tails into the molten solder(held at (260 ± 5) $^{\circ}\text{C}$ for (5 ± 1) sec., Recovery time $1\sim 2$ hours GB/T 5095.6 Method 12d / EIA-364-56A	外观: 无损伤 (参照6.1.1) Appearance: No damage.(refer to 6.1.1)
6.2.8	灼热丝 Glow wire (只针对 GWT750 $^{\circ}\text{C}$ 产 品 only for GWT750 $^{\circ}\text{C}$ products)	750 $^{\circ}\text{C}$ 的灼热丝顶部接触试验样品, 接触时间: (30 ± 1) s 接近和离开速率: $10\text{mm/s}\sim 25\text{mm/s}$ 灼热丝进入或贯穿试验样品深度: (7 ± 0.5) mm 750 $^{\circ}\text{C}$ glow wire contacts with mated connector, Time: (30 ± 1) s Speed of closing to and leaving: $10\text{mm/s}\sim 25\text{mm/s}$ Depth that glow wire penetrates mated connector: (7 ± 0.5) mm GB/T 5169.10	1.试验样品燃烧时间不超过2s。 The time that mated connector burns is not more than 2s. 2、灼热丝离开后的30s内样件无火焰或灼 热情况, 且无滴落物或滴落物不燃烧。 30s after glow wire leaves mated connector, it does not burn or is no incandescence and it does not fall something or falling something does not burn.

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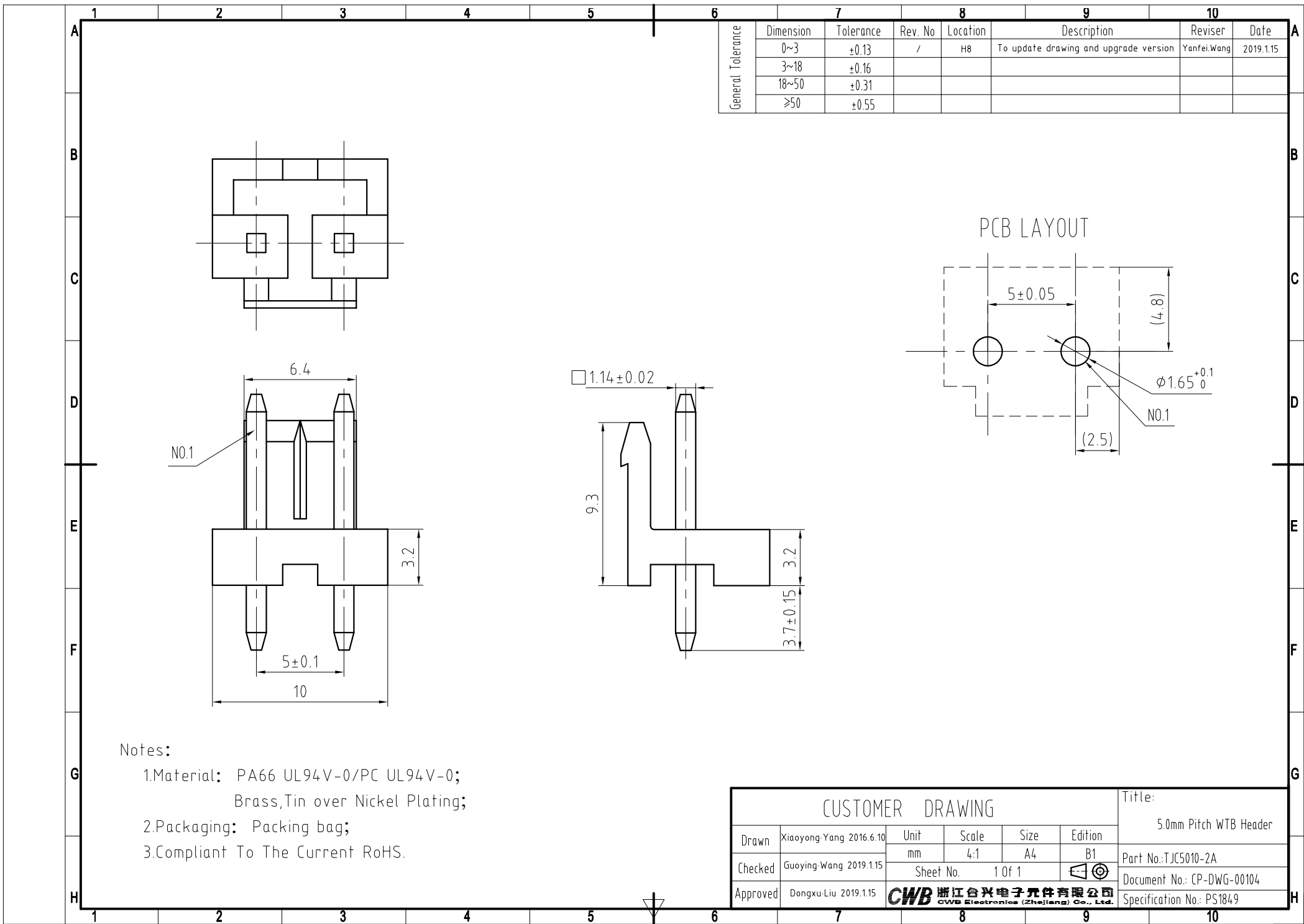
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7. 测试分组 Test Sequences (Samples: 5PCS)

测试组 GROUP NUMBER	A	B	C	D	E	F	G	H	I
外观 Appearance	1	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1
针的固定力 Retention Force for Pin	2								
耐高温 Heat Resistance		2							
耐低温 Cold Resistance			2						
恒定湿热 Humidity				2					
温度循环 Temperature Cycling					2				
盐雾 Salt Spray						2			
可焊性 Solderability							2		
耐焊接热 Resistance to Soldering Heat								2	
灼热丝 Glow wire									2

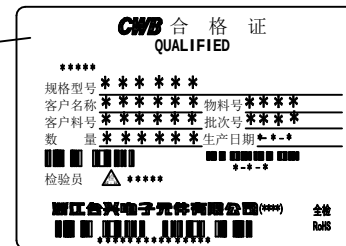
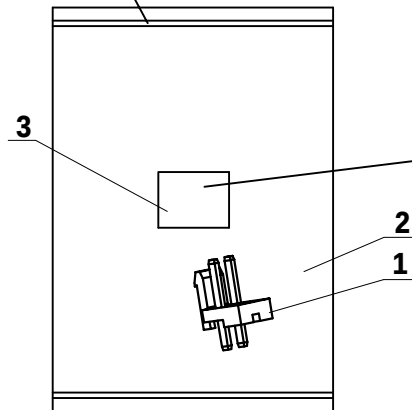
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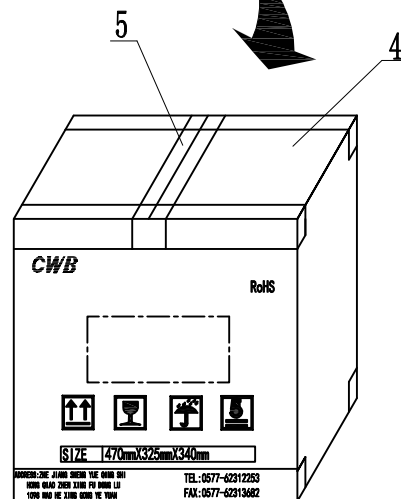
General Tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13	/	H8	To update drawing and upgrade version	Yanfei.Wang	2019.1.15
	3~18	±0.16					
	18~50	±0.31					
	≥50	±0.55					

Packing bag

Sealed



Packing box



5	Gummed tape			
4	Packing box			
3	Certificate			
2	Packing bag			
1	TJCS010-2A Series Header			
Number	Designation	Part No.	Pcs/bag	Remarks

CUSTOMER DRAWING						Title:
Drawn	Xiaoyong-Yang 2016.6.10	Unit	Scale	Size	Edition	Packaging Specification of 5.0mm Pitch WTB Header
Checked	Guoying-Wang 2019.1.15	mm	/	A4	B1	Part No.: TJC5010-2A
Approved	Dongxu-Liu 2019.1.15	Sheet No.	1 Of 1			Document No.: BZ-DWG-00057
CWB 浙江合兴电子有限公司 CWB Electronics (Zhejiang) Co., Ltd.						Specification No.: PS1849