

标题：PH 系列连接器

Title: PH Connector

目录

Contents

1. 更改履历 Change record
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

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 (Research & Development Dept.) Tel: 86-577-62312253 (Sales Dept.)	制定 Edit: <u>王曲 2021.8.22</u>	产品名称 Product Name: <u>PH 系列连接器</u>
	审核 Check: <u>王国英 2023.9.21</u>	编号 Document No.: <u>PS4110</u>
	批准 Approval: <u>刘冬旭 2023.9.21</u>	版本 REVISION: <u>V17</u>

CWB						产品规格书		PRODUCT SPECIFICATION			
1. 更改履历 Change record											
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					
V0		/		首版发布 First release		王曲 2021/08/26 Qu.Wang 2021/08/26					
V1		/		根据新命名规范更新产品名称和规格 Update specifications and part no according to new naming specifications		吴宝晓 2022/03/17 Baoxiao.Wu 2022/03/17					
V2		/		添加 PH- nYI 连接器 Added PH-nYI connector		吴建晓 2022/05/25 Jianxiao.Wu 2022/05/25					
V3		CH-PH-nYI:绝缘直径: φ0.83mm-φ1.0mm CH-PH-nYI: Insulation diameter:φ0.83mm-φ1.0mm		CH-PH-nYI: 绝缘直径: φ 0. 75mm- φ 1. 05mm CH-PH-nYI: Insulation diameter:φ0.75mm-φ1.05mm		尹恒 2022/06/24 Heng.Yin 2022/06/24					
V4		/		更新 PH-nYI 导线及适用范围 Update PH-nYI wire and scope of application		尹恒 2022/07/07 Heng.Yin 2022/07/07					
V5		PH-nAWBJ 产品缺少 PA10T 材料 PH-nAWBJ product lacks PA10T material		更新 PH-nAWBJ 产品材料信息 Update PH-nAWBJ product material information		尹恒 2022/08/01 Heng.Yin 2022/08/01					
V6		/		更新 CH-PH 图纸、新增尺寸管控 Update CH-PH drawings and add dimension control		尹恒 2022/09/21 Heng.Yin 2022/09/21					
V7		/		更新 PH-nAWBJ、PH-nAB 使用材料 Update PH-nAWBJ, PH-nAB using materials		尹恒 2022/11/01 Heng.Yin 2022/11/01					
V8		/		新增 PH-nAB 产品包装方式 New PH-nAB product packaging		尹恒 2022/12/17 Heng.Yin 2022/12/17					
V9		/		删除 CH-PH-2 型号 The CH-PH-2 model is deleted		胡杰斌 2023/07/13 Jiebin.Hu 2023/07/13					
V10		/		添加 PH-6AWJ2. 1, PH-nAWJK2. 5, PH-nA2. 0 连接器 Added PH-6AWJ2.1, PH-nAWJK2.5, PH-nA2.0 connector		徐秋秋 2023/09/15 Qiuqiu.Xu 2023/09/15					
V11		/		新增 CH-PH-3 型号 New CH-PH-3 model		连云龙 2023/09/21 Yunlong.Lian 2023/09/21					
V12		/		新增 PH-nAW3. 0 型号 New PH-nAW3.0 model		徐秋秋 2024/03/19 Qiuqiu.Xu 2024/03/19					
V13		/		纠错 Error correction		徐秋秋 2024/05/22 Qiuqiu.Xu 2024/05/22					
V14		/		命名规则更新 Naming convention update		徐秋秋 2024/07/30 Qiuqiu.Xu 2024/07/30					
V15		/		PH-nAWJK2.5 命名添加 UL PH-nAWJK2.5 Name Add UL		连云龙 2024/08/07 Yunlong.Lian 2024/08/07					
V16		/		新增 PH-5ADGK 型号 New PH-5ADGK model		连云龙 2025/04/16 Yunlong.Lian 2025/04/16					
V17		/		TJC20046-2/4YS: C 尺寸改为 3 TJC20046-2/4YS: The C size has been updated to 3		徐秋秋 2025/05/23 Qiuqiu.Xu 2025/05/23					
产品名称 Product Name:		PH 系列连接器		编号 Document No.		PS4110		版本号 Version No.		V17	
PAGE: 2 / 11											

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 WTB 2.0 阴型 & 阳型电子连接器，产品名称：PH 系列连接器。

This product specification covers the requirement for wire to board 2.0mm pitch Receptacle & Plug connector, which are designed and manufactured by CWB Electronics(ZheJiang) Co.,LTD. P/N: PH Connector.

3. 产品描述 Product description

PH 系列连接器产品为家电连接器产品，产品部件组成如下：

The PH series connector designed for home appliances connection. part checklist as following form:

Part name 零件名称	Part No. 规格型号	Previous part No. 曾用规格型号	Description 描述
插簧 Contact	CH-PH-**-*	CH-PH	AWG#26~AWG#24
插簧 Contact	CH-PH-1-**-*	CH-PH-1	AWG#28
插簧 Contact	CH-PH-3-**-*	CH-PH-3	AWG#28~AWG#24
阴连接器（绝缘位移连接） Receptacle (IDC)	PH-nYI **(**-*)	PH-nYI	Wafer:PA66 UL94V-0 Post: Bronze Tin Plating
孔座（含锁紧片保持结构） Housing(W/Retainer)	PH-nY **(**-*)	PH-nY	PA66 UL94 V-0, PA66 V-2, PA66 UL94V-0 GWT750℃
孔座（含锁紧片保持结构） Housing(W/Retainer)	PHB-nY **(**-*)	TJC20066-nY	PA66 UL94 V-0, PA66 UL94V-0 GWT750℃
锁紧片 Retainer	TJC20046-nYS(**-*)	TJC20046-nYS	PA66 UL94 V-0
阳连接器（立式，直插，含小弯） Header(V, DIP, W/Kink)	PH-nAK **(**-*)	PH-nA	Wafer: PA66 UL94 V-0, PA66 V-2, PA66 +GF V-2, PA66 UL94 V-0 GWT750℃ Post: Brass, tin plated
阳连接器（立式，直插） Header(V, DIP)	PH-nA(**-*)	PH-nA-1	Wafer: PA66 UL94 V-0, PA66 V-2 Post: Brass, tin plated
阳连接器（立式，直插） Header(V, DIP)	PH-2A2.0(**-*)	PH-2A-2.0	Wafer: PA66 UL94 V-0, PA66 V-2, PA66 +GF V-2 Post: Brass, tin plated
阳连接器（立式，直插） Header(V, DIP)	PH-nA2.8(**-*)	PH-nA-2.8	Wafer: PA66 UL94 V-0, PA66 V-2, PA66 +GF V-2 Post: Brass, tin plated
阳连接器（卧式，直插，含小弯） Header(H, DIP, W/Kink)	PH-nAWK **(**-*)	PH-nAW	Wafer: PA66 UL94 V-0, PA66 V-2, PA66 UL94V-0 GWT750℃ Post: Brass, tin plated
阳连接器（卧式，直插） Header(H, DIP)	PH-nAW(**-*)	PH-nAW-1	Wafer: PA66 V-0 Post: Brass, tin plated
阳连接器（卧式，直插） Header(H, DIP)	PH-nAW3.0(**-*)	/	Wafer: PA66 V-0 Post: Brass, tin plated

产品名称 Product Name:	PH 系列连接器	编号 Document No.	PS4110	版本号 Version No.	V17
-----------------------	----------	--------------------	--------	--------------------	-----



产品规格书

PRODUCT SPECIFICATION

阳连接器（立式，直插，含定位柱，含小弯） Header(V, DIP, W/Boss, W/Kink)	PH- nADK(**-*)	PH- nAD	Wafer: PA66 UL94 V-0 Post: Brass, tin plated
阳连接器（卧式，直插，带挡板，含小弯） Header(H, DIP, W/PCB stabilizer, W/Kink)	PH-nAWJK (**-*)	PH-nAWJ	Wafer: PA66 UL94 V-0, PA66 V-2, PA66 +GF V-2, PA66 UL94 V-0 GWT750℃ Post: Brass, tin plated
阳连接器（卧式，直插，带挡板，含小弯） Header(H, DIP, W/PCB stabilizer, W/Kink)	PH-nAWJK2.5 **(**-*)	PH-nAWJ-2.5 短脚	Wafer: PA66 UL94 V-0, PA66 V-2 Post: Brass, tin plated
阳连接器（卧式，直插，带挡板） Header(H, DIP, W/PCB stabilizer)	PH-nAWJ2.1(**-*)	PH-nAWJ-2.1	Wafer: PA66 UL94 V-0,PA66 V-2 Post: Brass, tin plated
阳连接器（卧式，直插，带挡板） Header(H, DIP, W/PCB stabilizer)	PH-nAWJ2.4(**-*)	PH-nAWJ-2.4	Wafer: PA66 UL94 V-0,PA66 V-2 Post: Brass, tin plated
阳连接器（卧式，直插，带挡板，含小弯） Header(H, DIP, W/PCB stabilizer, W/Kink)	PH-nAWJDK(**-*)	PH-nAWDJ	Wafer: PA66 UL94 V-0,PA66 V-2 Post: Brass, tin plated
阳连接器（卧式，表面装贴，带挡板） Header(H, SMT, W/PCB stabilizer)	PH-nAWBJ(**-*)	PHC-nA	Wafer:PA9T+GF UL94 V-0/PA10T+GF UL94 V-0/LCP UL94 V-0 Post: Brass, tin plated
阳连接器（立式，表面装贴） Header(V, SMT)	PH-nAB **(**-*)	PHB- nA	Wafer: PA9T+GF UL94 V-0/PA10T+GF UL94 V-0 Post: Brass, tin plated
阳连接器（立式，表面装贴，带吸嘴盖） Header(V, SMT, With cover)	PH-nABX(**-*)	PH-nAB-1	Wafer: PA9T+GF UL94 V-0/PA10T+GF UL94 V-0 Post: Brass, tin plated
阳连接器（立式，直插，含定位柱，高脚，含小弯） Header(V, DIP, W/boss, H/box type,W/Kink)	PH- nADGK(**-*)	/	Wafer: PA66 UL94 V-0 Post: Brass, 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，以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，以本规格书要求为优先。

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 环境试验 概述和指南

Environmental testing —— General and guidance

GB/T 2423 环境试验 试验方法

Environmental testing —— Test methods

GB/T 2424 环境试验 支持文件及导则

Environmental testing —— Supporting documentation and guidance

GB/T 5095 电子设备机电元件基本试验规程及测量方法

产品名称 Product Name:	PH 系列连接器	编号 Document No.	PS4110	版本号 Version No.	V17
-----------------------	----------	--------------------	--------	--------------------	-----



产品规格书

PRODUCT SPECIFICATION

Electromechanical components for electronic equipment Basic testing procedures and measuring methods

EIA-364

EIA-364 系列标准

EIA-364 series standards

IPC EIA IPC JEDEC J STD 002E 连接器 / 插座终端可焊性测试方法

Solderability Tests for Component Leads, Terminations, Lugs, Terminals and Wires

产品符合 RoHS 标准。

The product should comply with RoHS.

5. 参数范围 Parameter ratings:

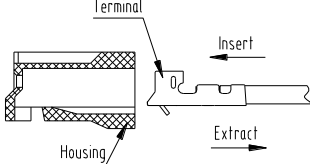
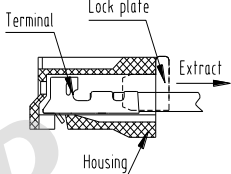
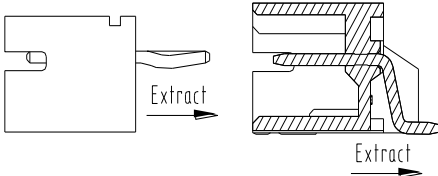
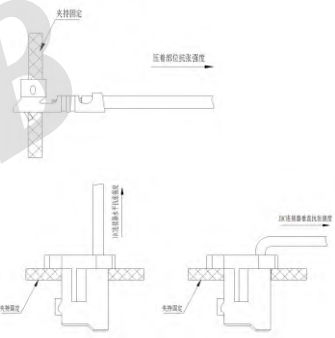
额定电流 [AC(有效值)/DC] Rated current [AC(rms)/DC]	AWG#28	AWG#26	AWG#24
	1.0A Max.	1.5A Max.	2.0A Max.
适用 PCB 板 Applicable PCB	Board thickness: 0.8mm-1.6mm Hole diameter: ϕ 0.7mm- ϕ 0.8mm		
额定电压[AC(有效值)/DC] Rated voltage [AC(rms)/DC]	250V		
使用温度范围（包含温升） Operating temperature range (include temperature rise)	-40℃ ~ +105℃		
适用线型（具体适用线型请参考 压接规格书） Applicable wires(Please refer to the crimping specification for details)	Crimp Conn.	CH-PH	Wire size: AWG#26~AWG#24 (0.13mm ² ~0.2mm ²) Insulation diameter: ϕ 1.3mm~ ϕ 1.4mm
		CH-PH-1	Wire size: AWG#28 (0.08mm ²) Insulation diameter: ϕ 1.2mm
		CH-PH-3	Wire size: AWG#28~AWG#24 (0.08mm ² ~0.2mm ²) Insulation diameter: ϕ 1.2mm~ ϕ 1.4mm
	IDC Conn.	PH-nYI	Wire size: AWG#28~AWG#26(0.08mm ² ~0.13mm ²) Recommended UL Grade: UL 1061、UL10272 Insulation diameter: ϕ 0.75mm- ϕ 1.05mm

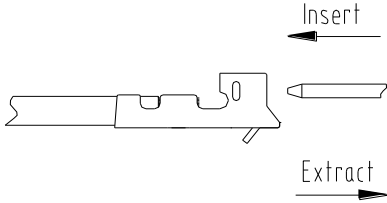
6. 产品性能 Performance

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 5095.2 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.

产品名称 Product Name:	PH 系列连接器	编号 Document No.	PS4110	版本号 Version No.	V17
-----------------------	----------	--------------------	--------	--------------------	-----

6.1.2	端子插入力与固定力 Insertion force and retention force for contact	应测量将端子沿轴线方向插入孔座和拔出孔座的力，测试速度不大于25 mm/min。 The force of inserting and pulling the contact into and out of the housing along the axis shall be measured (Testing speed: <25 mm/min.) GB/T 5095.8 Method 15d / EIA-364-29B应测(不带锁紧片)  (带锁紧片) 	插入力 (Insertion force) Max.	固定力 (不带锁紧片测试) Retention force (Test without lock plate) Min.	固定力 (带锁紧片测试) Retention force (Test with lock plate) Min.
			10N	15N	20N
6.1.3	针的固定力 Post retention force	沿插针轴线方向施加推力，测量将插针从塑件上分离的力，测试速度不大于 25 mm/min。 The end of a post shall be pushed in a direction perpendicular to a wafer. The load required to make the post start moving from the wafer shall be measured. (Testing speed: <25 mm/min.) GB/T 5095.8 Method 15a / EIA-364-29B. 	压着式连接器 Crimp Conn. 10N Min. 刺破式连接器 IDC Conn. 4.9 N Min.		
6.1.4	压着部位抗张强度 Crimp tensile strength	在已压接端子的头部和导线上施加拉力，并测量将导线从端子拉出或导线断裂所需的力，测试速度 1~5 mm/sec。 Pulling load shall be applied to a correctly crimped contact and a wire. The load required to pull the wire out of the contact or break the wire shall be measured. (Testing speed: 1~5 mm/sec.)  GB/T5095.8 Method 16d / EIA-364-08B	压着式连接器 Crimp Conn. AWG#28: 10N Min. AWG#26: 20N Min. AWG#24: 30N Min. 刺破式连接器 IDC Conn. 垂直张力: AWG#28: 11.8N Min. AWG#26: 11.8N Min. 水平张力: AWG#28: 14.7N Min. AWG#26: 19.6N Min.		
产品名称 Product Name:	PH 系列连接器	编号 Document No.	PS4110	版本号 Version No.	V17

6.1.9	端子的插拔力 Insertion and withdrawal force for pin in the contact	固定连接器和/或测力计，在端子轴线方向将插针插入和拔出插簧，测试速度不大于 25 mm/min。 Insert the pin contact into and pull out the socket contact in the direction of the terminal axis (Testing speed: <25 mm/min.) GB/T 5095.7 Method 13b / EIA-364-13B 	插入力: 8N Max. Insertion force: 8N Max. 拔出力: 1.5N Min. Withdrawal force: 1.5N Min.
-------	---	--	---

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。 Mate connectors with dry circuit to test contact resistance GB/T 5095.2 Method 2a / EIA-364-23B	10mΩ Max. (Initial) 20mΩ Max. (Final)
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 contacts and between contacts 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 800V AC (有效值)，漏电流 1mA 的电压作用,时间 1min。 Apply a voltage of 800V AC (rms) and leakage current of 1mA between adjacent contacts or ground cables for 1 minute. 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 Mate 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	△30℃ 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 250 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 250 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：20mΩ Max. Contact resistance: 20mΩ Max. 绝缘电阻：500 MΩ Min. Insulation resistance:500 MΩ Min. 耐电压：500V Min. Withstand voltage: 500V Min.

产品名称 Product Name:	PH 系列连接器	编号 Document No.	PS4110	版本号 Version No.	V17
PAGE: 8 / 11					

6.3.2	耐低温 Cold resistance	连接器配合后,于 (-40±2)℃ 的空气中放置 240 小时,再回到室温中放置 (1~2) 小时测定 Mated connectors exposed to the condition of (-40±2)℃ for 240hours, 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: 20mΩ Max. Contact resistance: 20mΩ Max. 绝缘电阻: 500 MΩ Min. Insulation resistance: 500 MΩ Min. 耐电压: 500V Min. Withstand voltage: 500V Min.										
6.3.3	恒定湿热 Humidity	温度 (40±2)℃, 相对湿度 (90~95) % 搁置时间 240 小时,取出恢复 (1~2) 小时后检查. Mated connectors exposed to the condition of temperature (40±2)℃, humidity (90~95)% 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: 20mΩ Max. Contact resistance: 20mΩ Max. 绝缘电阻: 500 MΩ Min. Insulation resistance: 500 MΩ Min. 耐电压: 500V Min. Withstand voltage:500V Min.										
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 0.5 小时; b) 在 (85±2)℃ 的恒温条件下放置 0.5 小时; 从 a)到 b)为一个循环,周期温度转换时间应不大于 5 分钟,共进行 25 个循环,恢复 (1~2) 小时后检查 Mated connectors shall be tested under the following conditions <table><tr><th>Temperature ℃</th><th>Duration</th></tr><tr><td>1 -55 ±2</td><td>0.5h</td></tr><tr><td>2 Room Temp.</td><td>5 minutes Max.</td></tr><tr><td>3 +85 ±2</td><td>0.5h</td></tr><tr><td>4 Room Temp.</td><td>5 minutes Max.</td></tr></table> Step 1 to 4 is one cycle,25 cycles shall be tested, recovery time (1~2) hours GB/T 5095.6 method 11d / EIA-364-32C	Temperature ℃	Duration	1 -55 ±2	0.5h	2 Room Temp.	5 minutes Max.	3 +85 ±2	0.5h	4 Room Temp.	5 minutes Max.	外观:无损伤 (参照6.1.1) Appearance: no damage.(refer to 6.1.1) 接触电阻: 20mΩ Max. Contact resistance: 20mΩ Max. 绝缘电阻: 500 MΩ Min. Insulation resistance: 500 MΩ Min. 耐电压: 500V Min. Withstand voltage: 500V Min.
Temperature ℃	Duration												
1 -55 ±2	0.5h												
2 Room Temp.	5 minutes Max.												
3 +85 ±2	0.5h												
4 Room Temp.	5 minutes Max.												
6.3.5	硫化氢气体测试 (H ₂ S gas test)	连接器配合后,在温度 (40±3)℃、湿度 75%、H ₂ S 气体浓度为 3ppm 的环境中放置 96 小时 Mated connectors exposed to the condition of temperature (40±3)℃, humidity 75%, H ₂ S gas concentration of 3ppm for 96 hours	接触电阻: 20mΩ Max. Contact resistance: 20mΩ Max.										
6.3.6	工业气体(氨气)Industrial gas(Ammonia)(NH ₃)	连接器在每升容积内含25毫升3%氨溶液的氨气箱中暴露7小时 After 7 hours exposure in ammonia chamber with 25 mL of 3% ammonia solution for every liter of chamber capacity	无应力腐蚀开裂 No stress corrosion cracking										
6.3.7	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 48 小时,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 (1~2) 小时 48 hours spray, at temp (35±2)℃, NaCl mist concentration (5±1)%. After test wash parts and put it into room ambient for (1~2) 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 on material exposed, and plating material, slight erosion on the cutting surface is acceptable) 接触电阻: 20mΩ Max. Contact resistance: 20mΩ Max.										

产品名称 Product Name:	PH 系列连接器	编号 Document No.	PS4110	版本号 Version No.	V17
PAGE: 9 / 11					

6.3.8	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) °C, 时间 (4~5) 秒 Dip solder tails into the molten solder held at (245±5) °C for (4~5) seconds EIA-364-52	上锡率≥95%: Solder coverage: ≥95%
6.3.9	耐焊接热 Resistance to soldering heat	1、耐波峰焊热: 把试验样品需要焊接的部位浸入焊锡炉中, 锡炉温度 (260±5) °C; 时间 (5±1) 秒后, 在正常条件下恢复 (1~2) 小时 Resistance to wave soldering heat: Dip solder tails into the molten solder held at (260±5) °C for (5 ±1) seconds, recovery time (1~2) hours 2、手工焊接: 温度 (350±10) °C, 时间(1~2) seconds Manual soldering: (350±10)°C for (1~2) seconds 3、回流焊形式 (适合 SMT 类产品): 按图 1 的条件测试耐焊接热 Reflow type: The specimen shall be tested resistance, to soldering heat in the following conditions.	外观: 无损伤 (参照6.1.1) Appearance: no damage.(refer to 6.1.1)
6.3.10	灼热丝 Glow wire (只针对 GWT750°C 产品) Only for GWT750°C product)	750°C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: 10mm/s~25mm/s 灼热丝进入或贯穿试验样品深度: (7±0.5) mm 750°C glow wire contacts with mated connector: Contact time: (30±1)s Speed of closing to and leaving from: 10mm/s~25mm/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。或 The time that mated connector burns should be not more than 2s.or 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。 Thirty seconds after glow wire leaves mated connector, it does not burn or have no incandescence and it does not fall something, or the falling thing does not burn.

Recommended IR Reflow Temperature Profile:

1 Using Lead-Free Solder Paste

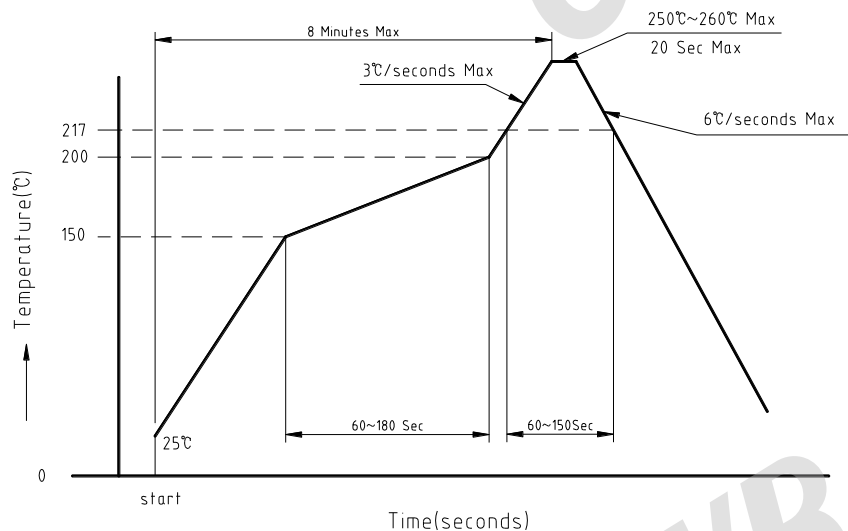


图 1 回流焊曲线图

产品名称 Product Name:	PH 系列连接器	编号 Document No.	PS4110	版本号 Version No.	V17
-----------------------	----------	--------------------	--------	--------------------	-----



产品规格书

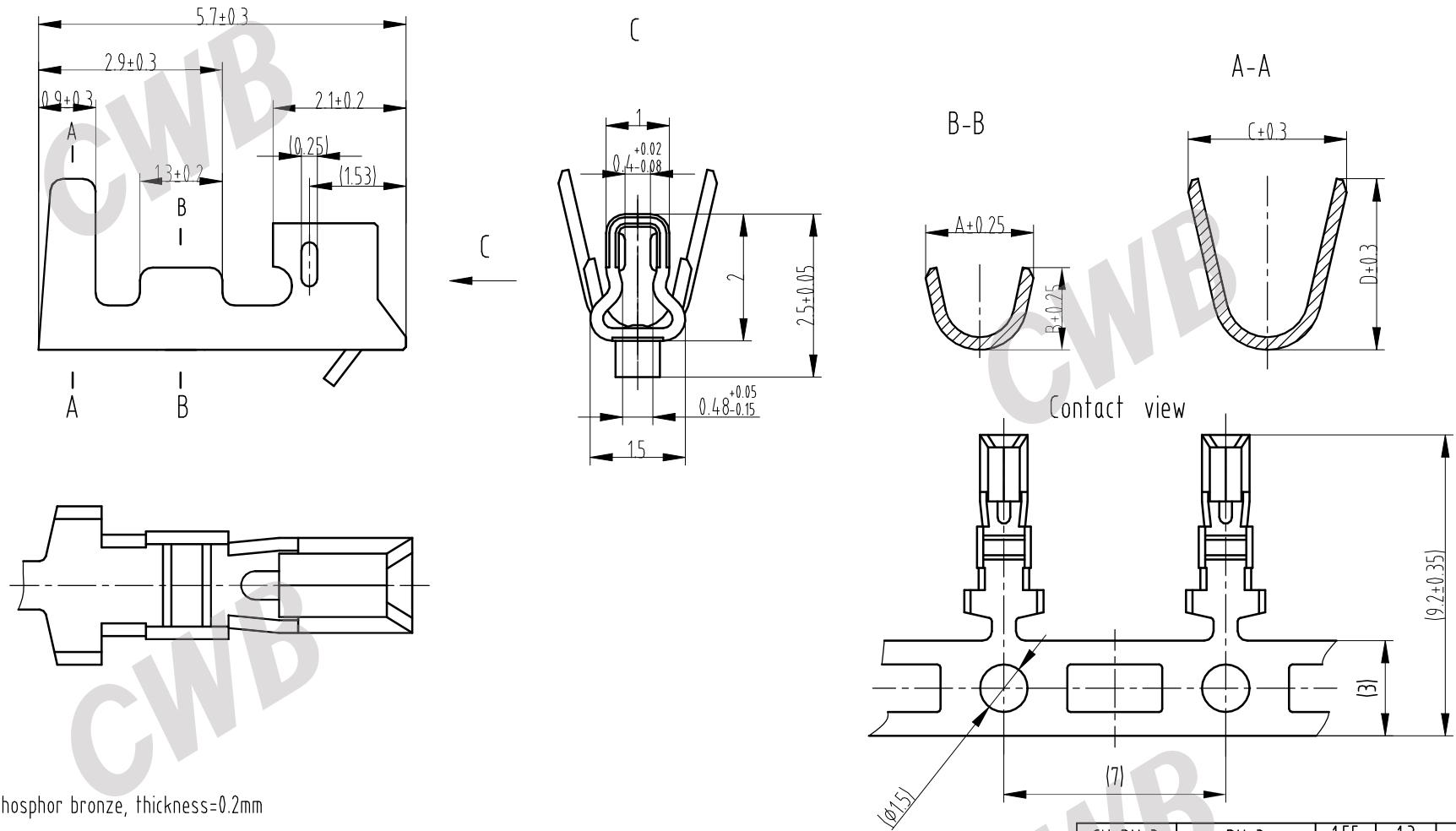
PRODUCT SPECIFICATION

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	R	S
外观Appearance	1	1	1	1	1,5	1,3	1,7	1	1	1,7	1,7	1,7	1,7	1,5	1,3	1,5	1	1,3	1,3
端子的插入力与固定力 Insertion force and retention force for contact	2																		
针的固定力 Post retention force		2																	
压着部位抗张强度 Crimping pull out force			2																
成品插入力与拔出力（去 锁扣） Insertion force and withdrawal force(without lock)				2															
机械振动Vibration					3														
机械冲击Shock						2													
机械寿命Durability							5												
端子的插拔力 Insertion and withdrawal force for pin in the contact								2											
接触电阻 Contact resistance					2,4		2,6			2,4	2,4	2,4	2,4	2,4		2,4			
绝缘电阻Insulation resistance							3			5	5	5	5						
耐电压Withstand voltage							4			6	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						
硫化氢气体测试 (H ₂ S gas test)														3					
工业气体(氨气) Industrial gas(Ammonia)(NH ₃)															2				
盐雾Salt spray																3			
可焊性Solderability																	2		
耐焊接热Resistance to soldering heat																		2	
灼热丝 Glow wire																			2

产品名称 Product Name:	PH 系列连接器	编号 Document No.	PS4110	版本号 Version No.	V17
PAGE: 11 / 11					

General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13					
	3~18	±0.23					
	18~50	±0.35					
	≥50	±0.55					



Notes:

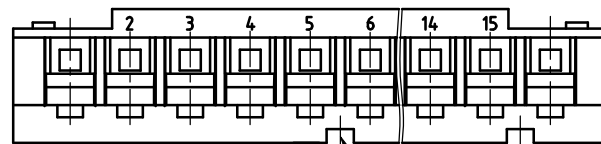
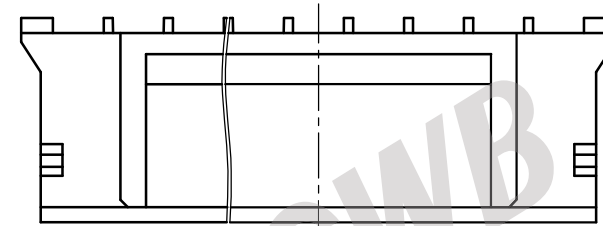
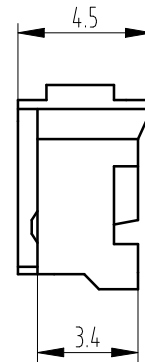
- 1.Material: Phosphor bronze, thickness=0.2mm
- 2.Surface finish: Tin plated
- 3.Matched housing: PH-nY/PHB-nY
- 4.Applicable wires: CH-PH: AWG#26~ AWG#24
CH-PH-1: AWG#28
CH-PH-3: AWG#28~ AWG#24
- 5.Compliant to the current RoHS

CH-PH-3	PH-3	1.55	1.3	2.2	2.7
CH-PH-1	PH-1	1.2	1.2	1.9	1.9
CH-PH	PH	1.7	1.3	2.5	2.7
Part No.	Previous part No	Dimension			
		A	B	C	D

CUSTOMER DRAWING						Title: 2.0mm pitch WTB contact	
Drawn	Naihao.Wang 2021.9.6	Unit	Scale	Size	Edition	Part No.CH-PH-*/CH-PH-1-*/CH-PH-3-*	
		mm	10:1	A4	B1	Previous part No.: PH/PH-1/PH-3	
Checked	GuoYing.Wang 2022.3.17	Sheet No.		1 Of 1			
Approved	Dongxu.Liu 2022.3.17	CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				Document No.:CP-DWG-01176	
						Specification No.:PS4110	

16	PH-16Y	30	32.5	33.8	
15	PH-15Y	28	30.5	31.8	
14	PH-14Y	26	28.5	29.8	
13	PH-13Y	24	26.5	27.8	
12	PH-12Y	22	24.5	25.8	
11	PH-11Y	20	22.5	23.8	
10	PH-10Y	18	20.5	21.8	
9	PH-9Y	16	18.5	19.8	
8	PH-8Y	14	16.5	17.8	
7	PH-7Y	12	14.5	15.8	
6	PH-6Y	10	12.5	13.8	
5	PH-5Y	8	10.5	11.8	
4	PH-4Y	6	8.5	9.8	
3	PH-3Y	4	6.5	7.8	1.3
2	PH-2Y	2	4.5	5.8	0.7
Ckts(n)	Part No.	A	B	C	D
Dimensions					

CUSTOMER DRAWING						Title:
						2.0mm pitch WTB housing
Drawn	Naihao.Wang	2021.9.6	Unit	Scale	Size	Edition
Checked	GuoYing.Wang	2022.3.17	mm	4:1	A4	B1
Approved	Dongxu.Liu	2022.3.17	Sheet No.	1 Of 1		
CWB 浙江合兴电子元件有限公司						Part No.: PH-nY *(**~*)
CWB Electronics (Zhejiang) Co., Ltd.						Previous part No.: /
						Document No.: CP-DWG-01177
						Specification No.: PS4110



PH-23Y

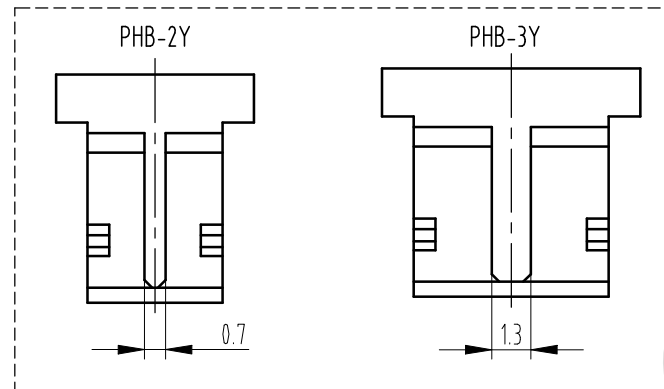
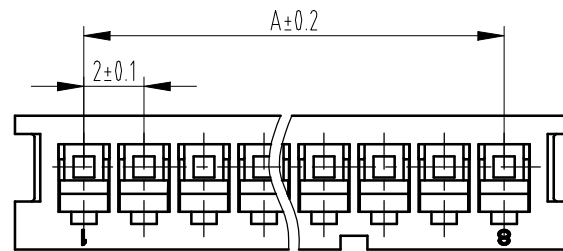
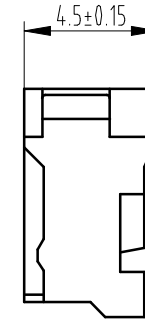
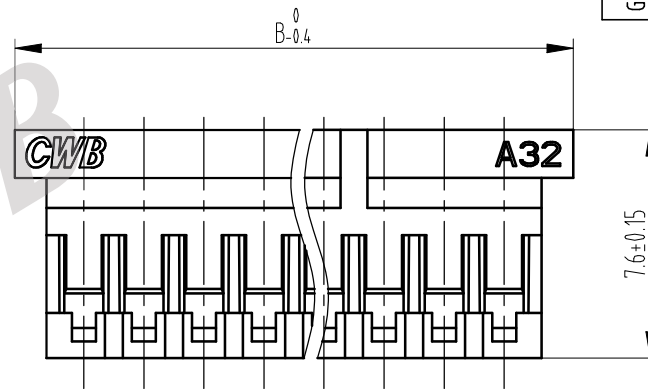
Technical drawing of the PH-23Y component, showing a cross-section. The drawing includes a central vertical slot with a dimension D indicated by a horizontal arrow. The component has a rectangular base and a wider top section with a central slot. There are also small rectangular features on the top and bottom edges.

5.Compliant to the current RoHS

16	PH-16Y	30	32.5	33.8	
15	PH-15Y	28	30.5	31.8	
14	PH-14Y	26	28.5	29.8	
13	PH-13Y	24	26.5	27.8	
12	PH-12Y	22	24.5	25.8	
11	PH-11Y	20	22.5	23.8	
10	PH-10Y	18	20.5	21.8	
9	PH-9Y	16	18.5	19.8	
8	PH-8Y	14	16.5	17.8	
7	PH-7Y	12	14.5	15.8	
6	PH-6Y	10	12.5	13.8	
5	PH-5Y	8	10.5	11.8	
4	PH-4Y	6	8.5	9.8	
3	PH-3Y	4	6.5	7.8	1.3
2	PH-2Y	2	4.5	5.8	0.7
Ckts(n)	Part No.	A	B	C	D
		Dimensions			

CUSTOMER DRAWING						Title: 2.0mm pitch WTB housing	
Drawn	Naihao.Wang	2021.9.6	Unit	Scale	Size	Edition	Part No.: PH-nY *(**~*)
Checked	GuoYing.Wang	2022.3.17	mm	4:1	A4	B1	Previous part No.: /
			Sheet No.			1 Of 1	
Approved	Dongxu.Liu	2022.3.17	CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				Specification No.: PS4110

General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13			Version upgrade	Bao.Xiao Wu	2022.3.17
	3~18	±0.23					
	18~50	±0.35					
	≥50	±0.55					



Notes:

1.Material:

Standards: PA66 UL94V-0

Others: PA66 UL94V-0 GWT 750℃

2.Matched header: PH series header

3.Matched contact: CH-PH/CH-PH-1

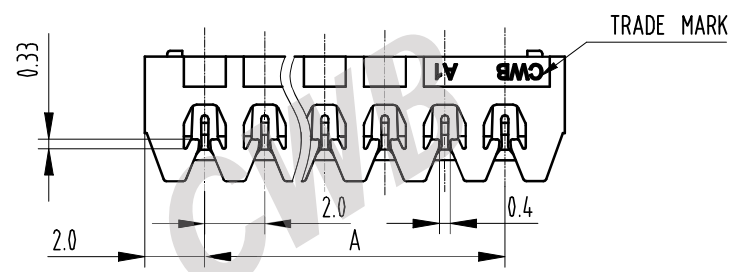
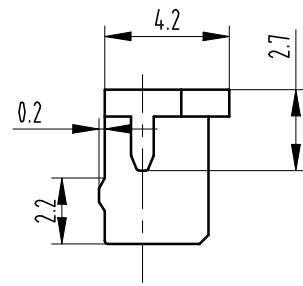
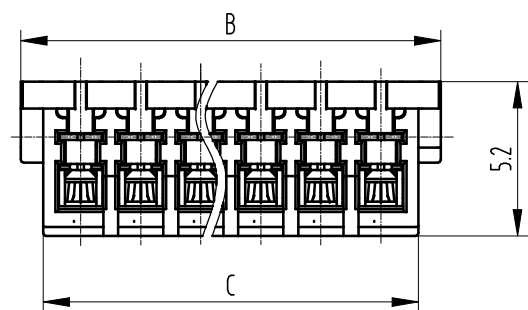
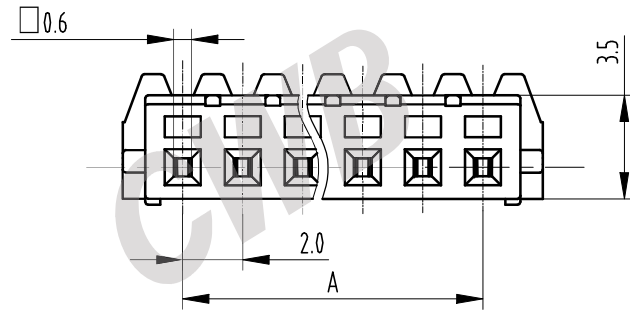
4.Packaging: packing bag

5.Compliant to the current RoHS

8	PHB-8Y	TJC20066-8Y	14	18.6
4	PHB-4Y	TJC20066-4Y	6	10.6
3	PHB-3Y	TJC20066-3Y	4	8.6
2	PHB-2Y	TJC20066-2Y	2	6.6
Ckts(n)	Part No.	Previous part No.	A	B
			Dimensions	

CUSTOMER DRAWING							Title: 2.0mm pitch WTB housing
Drawn	Naihao.Wang	2021.9.6	Unit	Scale	Size	Edition	Part No.: PHB-nY *((**~*))
Checked	GuoYing.Wang	2022.3.17	mm	4:1	A4	B1	Previous part No.: TJC20066-nY
			Sheet No.		1 Of 1		
Approved	Dongxu.Liu	2021.3.17	CWB 浙江台兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				Document No.: CP-DWG-01178
							Specification No.: PS4110

General Tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13	/	G2	Adjust the Insulation Dia	Heng.Yin	2022.6.24
	3~18	±0.23					
	18~50	±0.35					
	≥50	±0.55					

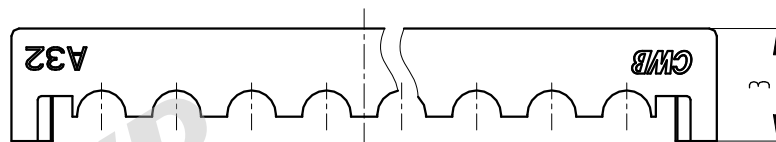
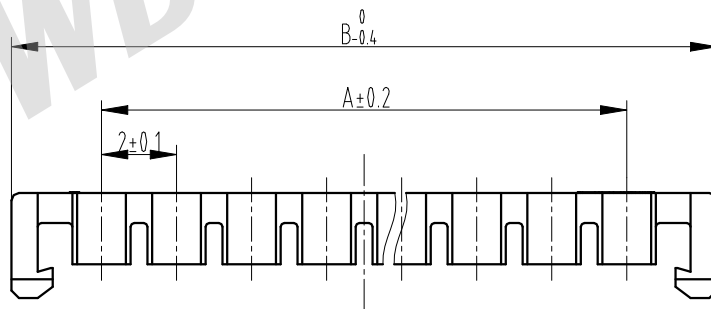


16	PH-16YI	30	34	32.5
15	PH-15YI	28	32	30.5
14	PH-14YI	26	30	28.5
13	PH-13YI	24	28	26.5
12	PH-12YI	22	26	24.5
11	PH-11YI	20	24	22.5
10	PH-10YI	18	22	20.5
9	PH-9YI	16	20	18.5
8	PH-8YI	14	18	16.5
7	PH-7YI	12	16	14.5
6	PH-6YI	10	14	12.5
5	PH-5YI	8	12	10.5
4	PH-4YI	6	10	8.5
3	PH-3YI	4	8	6.5
2	PH-2YI	2	6	4.5
Ckts(n)	Part No.	A	B	C
		Dimensions		

- Notes:
- 1.Material:
Housing:PA66 UL94 V-0
Contact:Phosphor bronze,Tin Plated
 - 2.Wire Size:AWG#26~AWG#28
Insulation Dia:φ0.75mm-φ1.05mm
 - 3.Packaging: Packing bag
 - 4.Compliant To The Current RoHS

CUSTOMER DRAWING						Title: 2.0mm Pitch WTB Conn. for receptacle	
Drawn	Pei Yang 2022.03.11	Unit	Scale	Size	Edition	Part No.: PH-nYI(**-*)	
Checked	Guoying.Wang 2022.06.24	mm	4:1	A4	B1	Previous part No.: /	
		Sheet No.		1 Of 1			
Approved	Dongxu.Liu 2022.06.24	CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				Document No.: CP-DWG-01584	
						Specification No.: PS4110	

General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13			Version upgrade	Bao.Xiao.Wu	2022.3.17
	3~18	±0.23	△	/	TJC20046-2/4YS: The C size has been updated to 3	Qiuqiu.Xu	2025.5.23
	18~50	±0.35					
	≥50	±0.55					



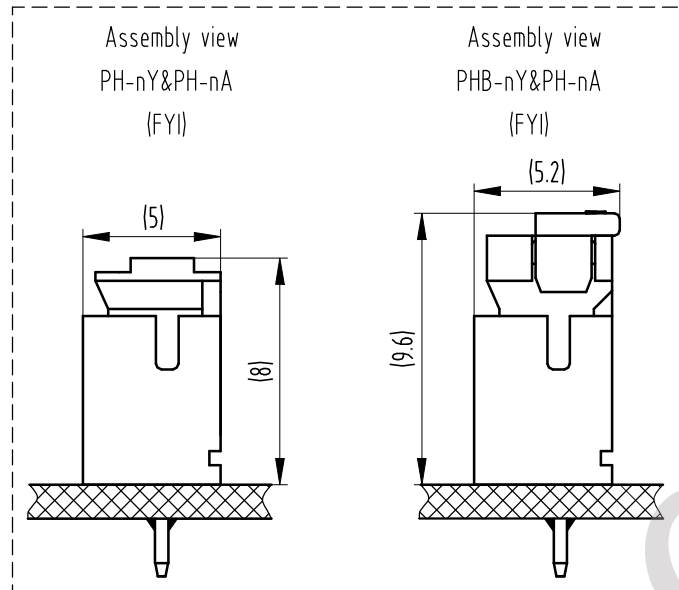
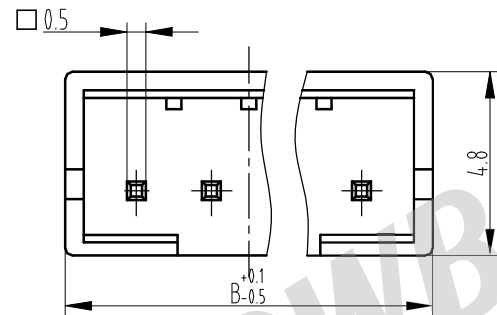
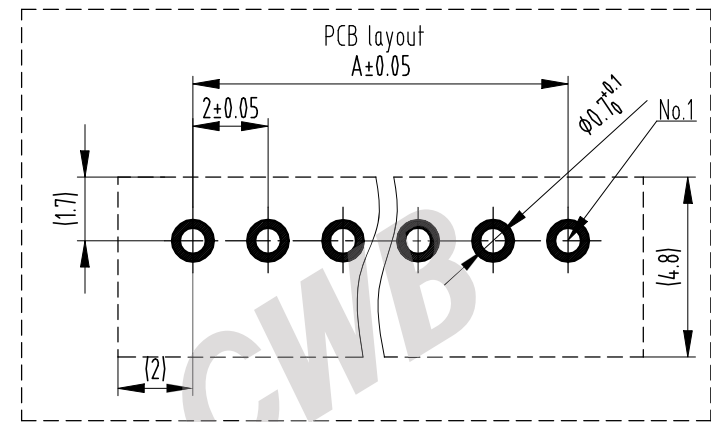
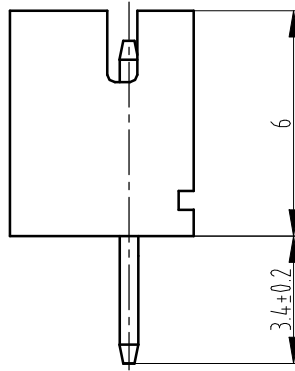
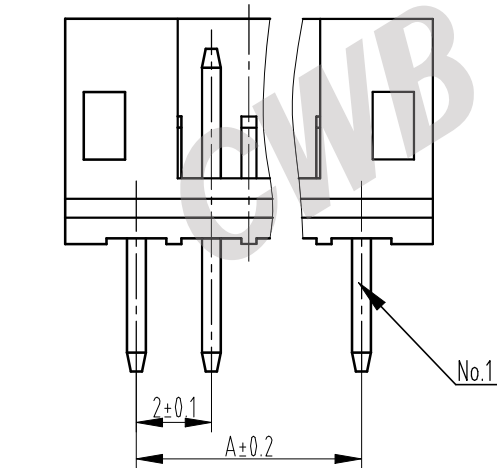
Notes:

- 1.Material: PA66 UL94 V-0
- 2.Matched housing:
2P~ 4P/8P: PHB-nY
5P/ 7P: TJC20046-nY
- 3.Packaging: packing bag
- 4.Compliant to the current RoHS

△				
8	TJC20046-8YS	14	18.8	2.8
7	TJC20046-7YS	12	16.8	2.8
5	TJC20046-5YS	8	12.8	2.8
4	TJC20046-4YS	6	10.8	3
3	TJC20046-3YS	4	8.8	2.8
2	TJC20046-2YS	2	6.8	3
Ckts(n)	part No.	A	B	C
		Dimensions		

CUSTOMER DRAWING						Title: 2.0mm pitch WTB retainer	
Drawn	Naihao.Wang 2021.9.6	Unit	Scale	Size	Edition	Part No.:	TJC20046-nYS (**-*)
Checked	GuoYing.Wang 2022.3.17	mm	5:1	A4	B	Previous part No.:	/
		Sheet No. 1 Of 1				Document No.:	CP-DWG-01179
Approved	Dongxu.Liu 2022.3.17	CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				Specification No.:	PS4110

General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13			Version upgrade	Bao.Xiao Wu	2022.3.17
	3~18	±0.23					
	18~50	±0.35					
	≥50	±0.55					



Note:

1.Material

Wafer:

Standards: PA66 UL94 V-0

Others: PA66 V-2

Post: Brass, tin plated

2.Matched housing: PH-nY/PHB-nY/PH-nYI

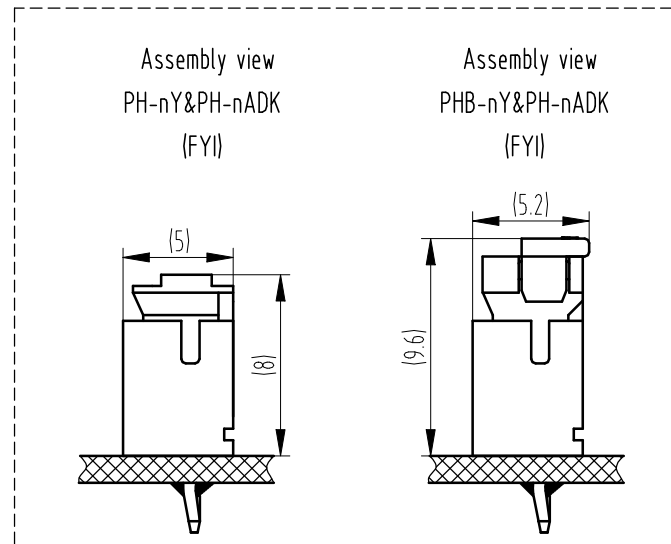
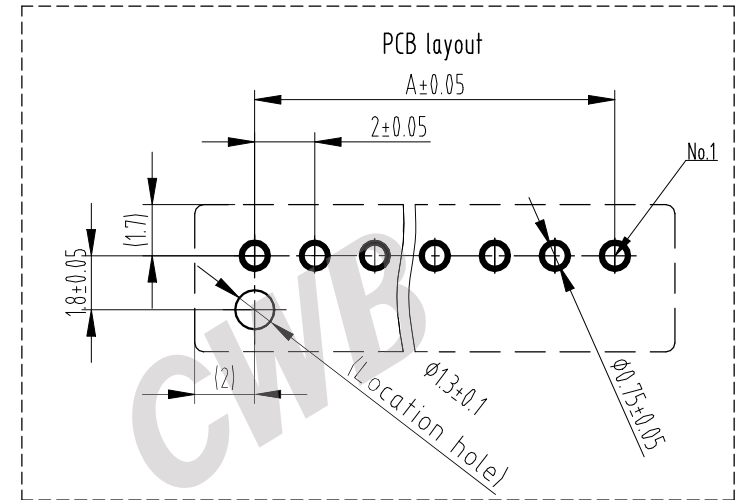
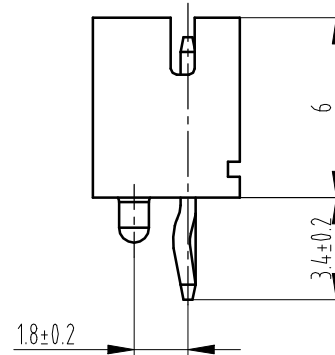
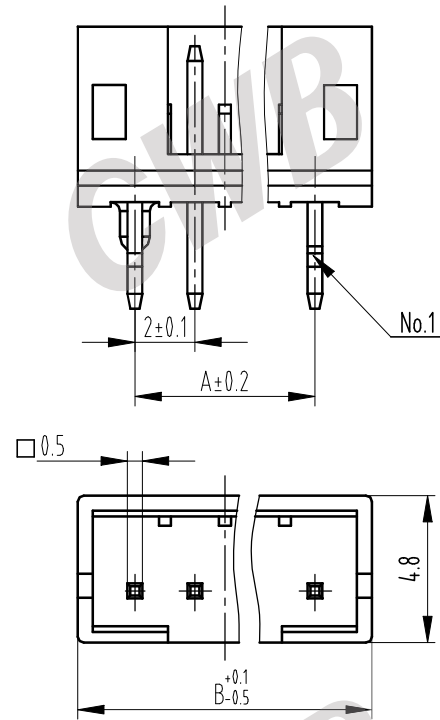
3.Packaging: packing bag

4.Compliant to the current RoHS

16	PH-16A	PH-16A-1	30	34
15	PH-15A	PH-15A-1	28	32
14	PH-14A	PH-14A-1	26	30
13	PH-13A	PH-13A-1	24	28
12	PH-12A	PH-12A-1	22	26
11	PH-11A	PH-11A-1	20	24
10	PH-10A	PH-10A-1	18	22
9	PH-9A	PH-9A-1	16	20
8	PH-8A	PH-8A-1	14	18
7	PH-7A	PH-7A-1	12	16
6	PH-6A	PH-6A-1	10	14
5	PH-5A	PH-5A-1	8	12
4	PH-4A	PH-4A-1	6	10
3	PH-3A	PH-3A-1	4	8
2	PH-2A	PH-2A-1	/	6
Ckts(n)	Part No..	Previous part No.	A	B
			Dimensions	

CUSTOMER DRAWING						Title: 2.0mm pitch WTB header
Drawn	Naihao.Wang 2021.9.6	Unit	Scale	Size	Edition	Part No.: PH-nA(**-*)
Checked	GuoYing.Wang 2022.3.17	mm	5:1	A4	B1	Previous part No.: PH-nA-1
		Sheet No. 1 Of 1				Document No.: CP-DWG-01190
Approved	Dongxu.Liu 2022.3.17	CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				Specification No.: PS4110

General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13			Version upgrade	Bao.Xiao Wu	2022.3.17
	3~18	±0.23					
	18~50	±0.35					
	≥50	±0.55					



Notes:

1.Material:

Wafer: PA66 UL94 V-0

Post: Brass, tin plated

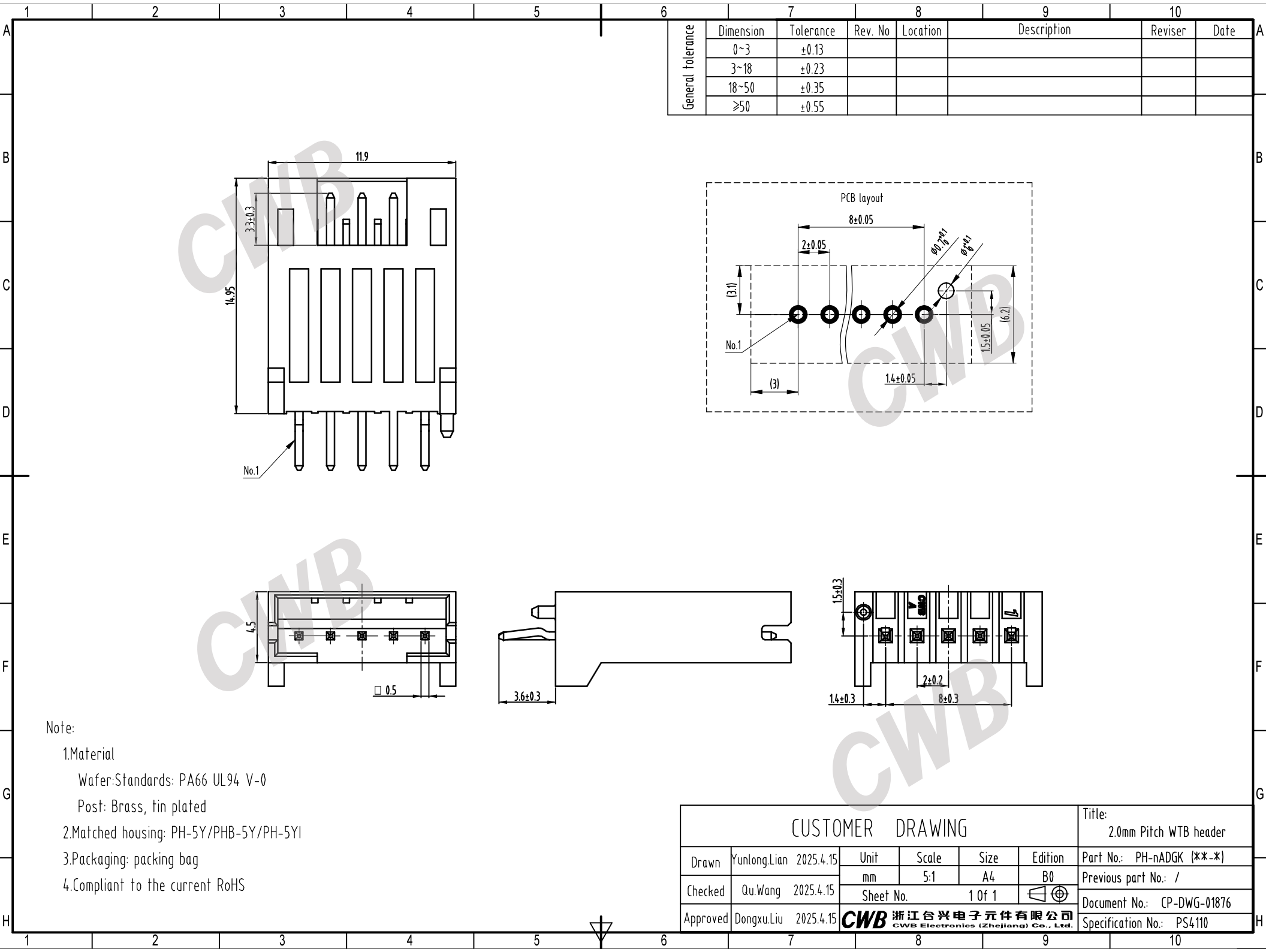
2.Matched housing: PH-nY/PHB-nY/PH-nYI

3.Packaging: packing bag

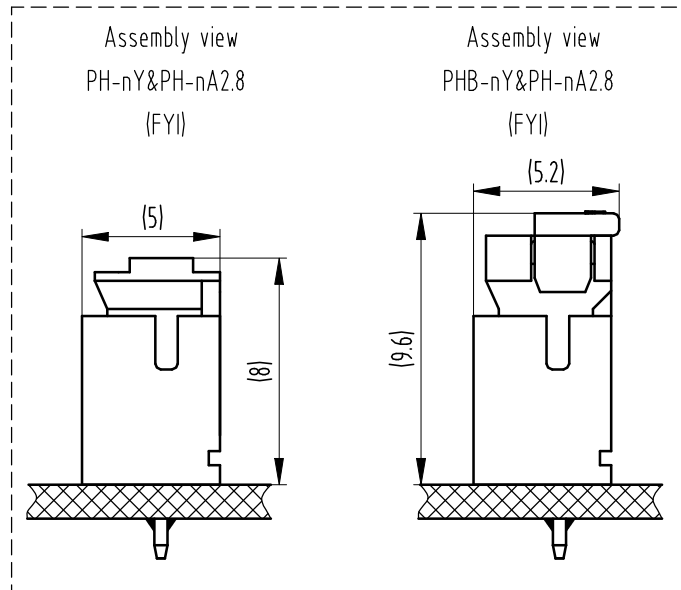
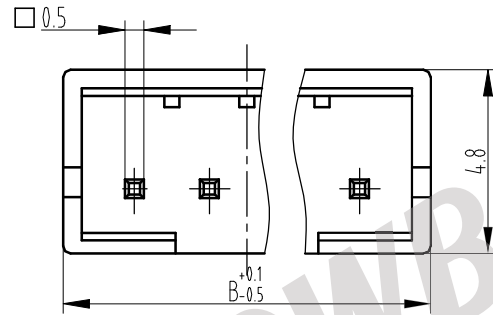
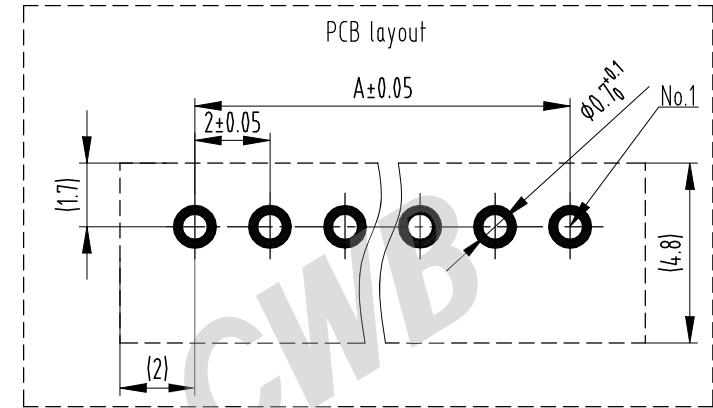
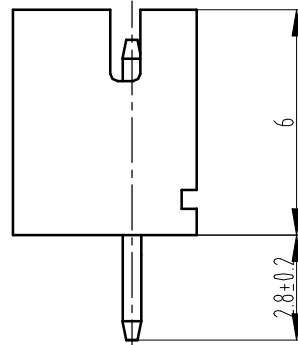
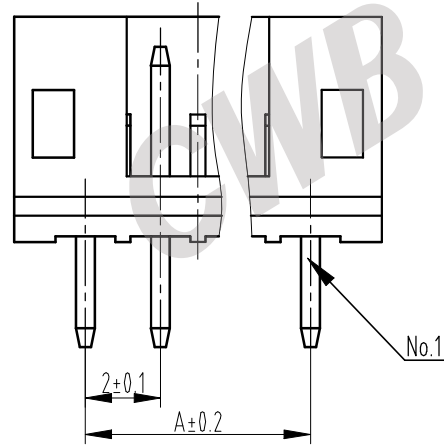
4.Compliant to the current RoHS

10	PH-10ADK	PH-10AD	18	22
8	PH-8ADK	PH-8AD	14	18
5	PH-5ADK	PH-5AD	8	12
Ckts(n)	Part No.	Previous part No.	A	B
			Dimensions	

CUSTOMER DRAWING						Title: 2.0mm pitch WTB header
Drawn	Naihao.Wang 2021.9.6	Unit	Scale	Size	Edition	Part No.: PH-nADK(**-*)
		mm	4:1	A4	B1	Previous part No.: PH-nAD
Checked	GuoYing.Wang 2022.3.17	Sheet No.		1 Of 1		Document No.: CP-DWG-01182
Approved	Dongxu.Liu 2022.3.17	CWB 浙江台兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				
						Specification No.: PS4110



General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13			Version upgrade	Bao.Xiao Wu	2022.3.17
	3~18	±0.23					
	18~50	±0.35					
	≥50	±0.55					



16	PH-16A2.8	PH-16A-2.8	30	34
15	PH-15A2.8	PH-15A-2.8	28	32
14	PH-14A2.8	PH-14A-2.8	26	30
13	PH-13A2.8	PH-13A-2.8	24	28
12	PH-12A2.8	PH-12A-2.8	22	26
11	PH-11A2.8	PH-11A-2.8	20	24
10	PH-10A2.8	PH-10A-2.8	18	22
9	PH-9A2.8	PH-9A-2.8	16	20
8	PH-8A2.8	PH-8A-2.8	14	18
7	PH-7A2.8	PH-7A-2.8	12	16
6	PH-6A2.8	PH-6A-2.8	10	14
5	PH-5A2.8	PH-5A-2.8	8	12
4	PH-4A2.8	PH-4A-2.8	6	10
3	PH-3A2.8	PH-3A-2.8	4	8
2	PH-2A2.8	PH-2A-2.8	/	6
Ckts(n)	Part No..	Previous part No.	A	B
			Dimensions	

Note:

1.Material

Wafer:

Standards: PA66 UL94 V-0

Others: PA66 V-2/PA66+GF V-2

Post: Brass, tin plated

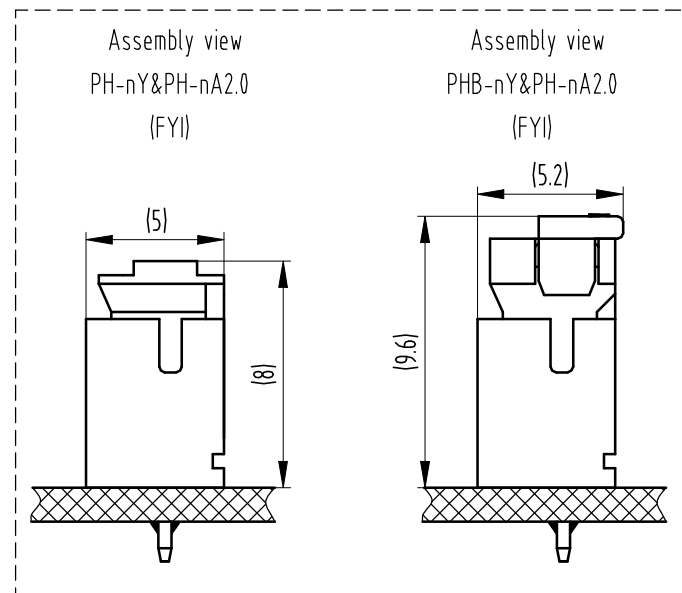
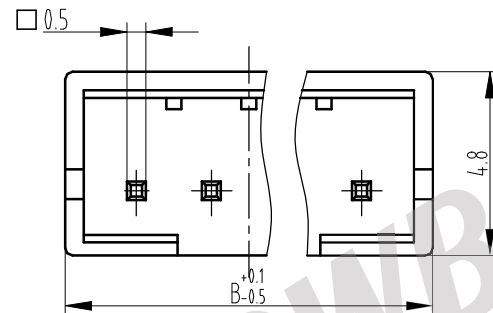
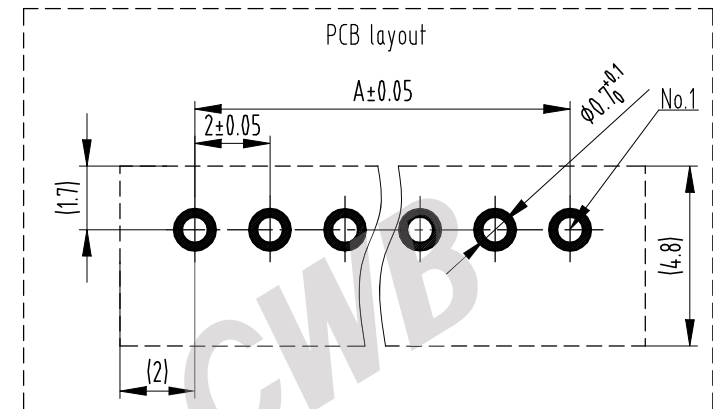
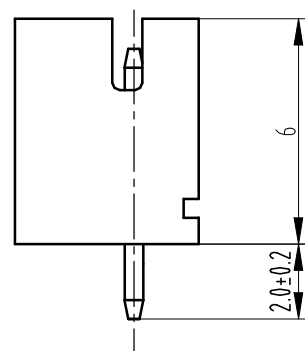
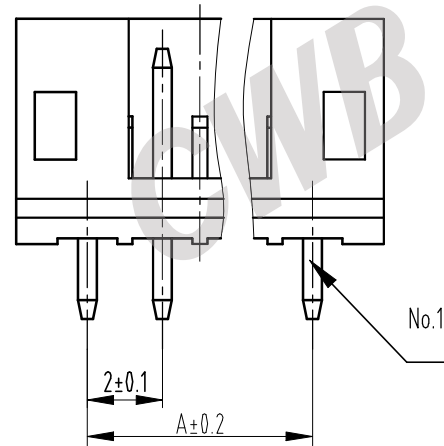
2.Matched housing: PH-nY/PHB-nY/PH-nYI

3.Packaging: packing bag

4.Compliant to the current RoHS

CUSTOMER DRAWING						Title: 2.0mm pitch WTB header
Drawn	Naihao.Wang 2021.9.6	Unit	Scale	Size	Edition	Part No.: PH-nA2.8(**-*)
Checked	GuoYing.Wang 2022.3.17	mm	5:1	A4	B1	Previous part No.: PH-nA-2.8
		Sheet No.		1 Of 1		Document No.: CP-DWG-01529
Approved	Dongxu.Liu 2022.3.17	CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				

General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13					
	3~18	±0.23					
	18~50	±0.35					
	≥50	±0.55					



Note:

1. Material

Wafer:

Standards: PA66 UL94 V-0

Others: PA66 V-2/PA66+GF V-2

Post: Brass, tin plated

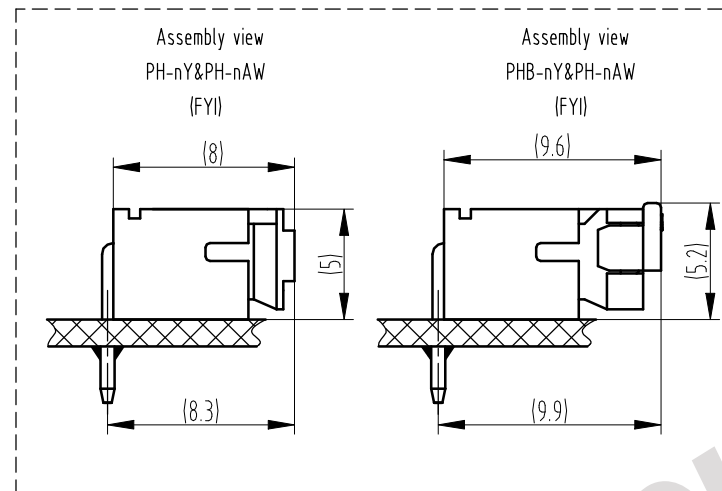
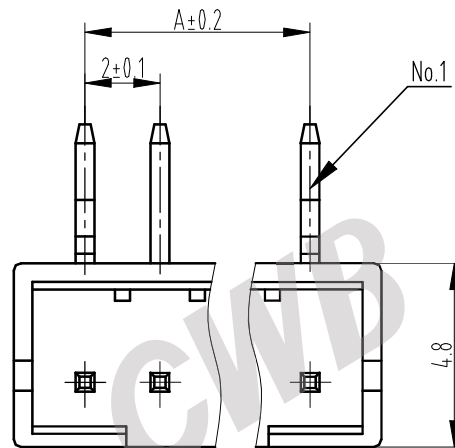
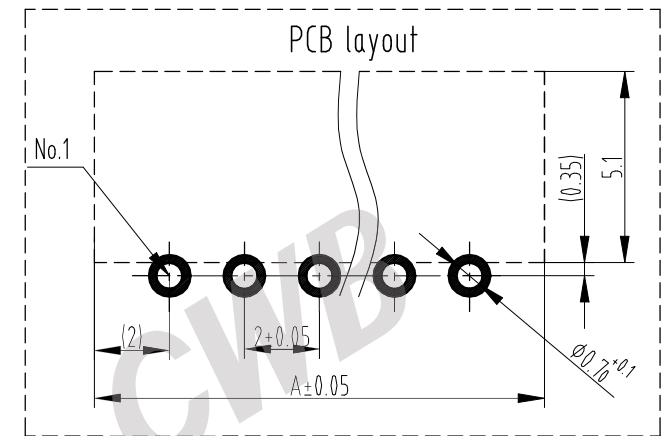
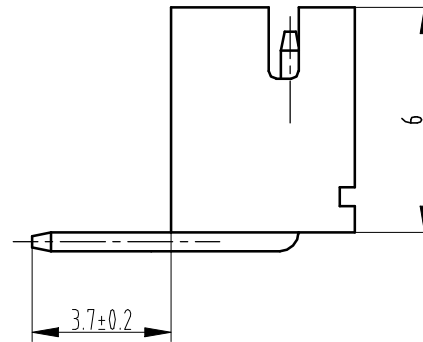
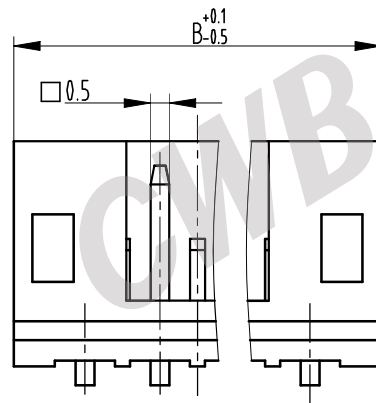
2. Matched housing: PH-nY/PHB-nY/PH-nYI

3.Packaging: packing bag

4.Compliant to the current RoHS

CUSTOMER DRAWING						Title: 2.0mm pitch WTB header
Drawn	YunLong.Lian 2023.9.6	Unit mm	Scale 5:1	Size A4	Edition B0	Part No.: PH-2A2.0(**-*)
Checked	Qu.Wang 2023.9.6	Sheet No. 1 Of 1				Previous part No.: PH-2A-2.0
Approved	Dongxu.Liu 2023.9.6	CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				Document No.: CP-DWG-01727
						Specification No.: PS4110

General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13			Version upgrade	Bao.Xiao Wu	2022.3.17
	3~18	±0.23					
	18~50	±0.35					
	≥50	±0.55					



16	PH-16AW	PH-16AW-1	30	34
15	PH-15AW	PH-15AW-1	28	32
14	PH-14AW	PH-14AW-1	26	30
13	PH-13AW	PH-13AW-1	24	28
12	PH-12AW	PH-12AW-1	22	26
11	PH-11AW	PH-11AW-1	20	24
10	PH-10AW	PH-10AW-1	18	22
9	PH-9AW	PH-9AW-1	16	20
8	PH-8AW	PH-8AW-1	14	18
7	PH-7AW	PH-7AW-1	12	16
6	PH-6AW	PH-6AW-1	10	14
5	PH-5AW	PH-5AW-1	8	12
4	PH-4AW	PH-4AW-1	6	10
3	PH-3AW	PH-3AW-1	4	8
2	PH-2AW	PH-2AW-1	/	6
Ckts(n)	Part No.	Previous part No.	A	B
			Dimensions	

Notes:

1.Material:

Wafer: PA66 V-0

Post: Brass, tin plated

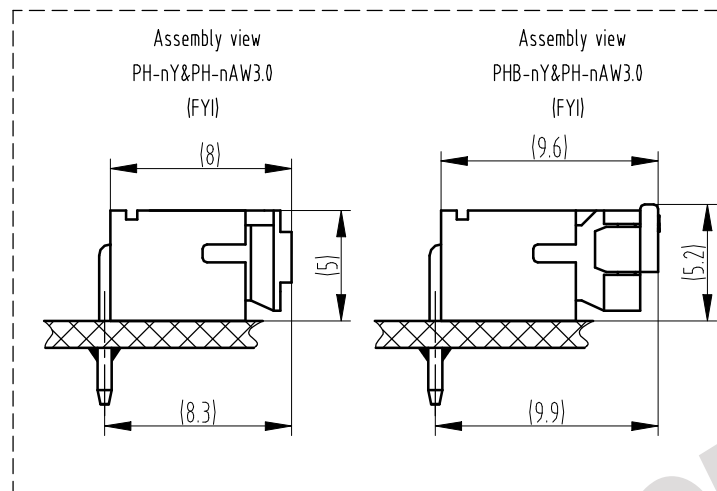
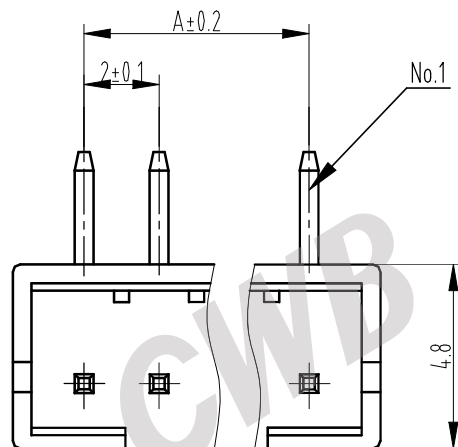
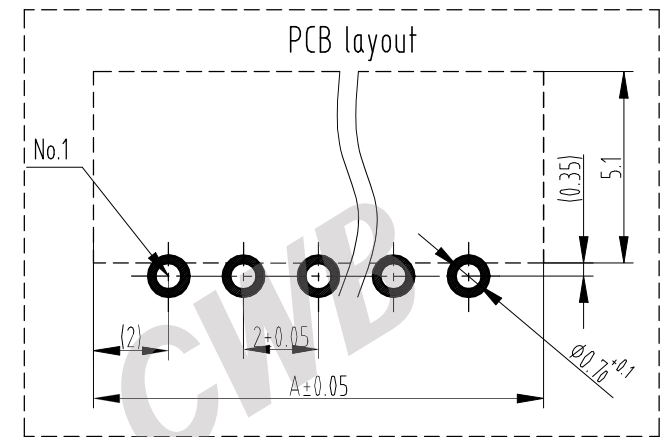
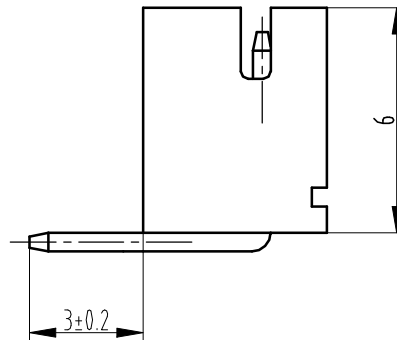
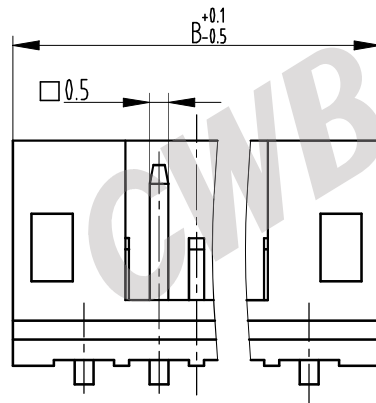
2.Matched housing: PH-nY/PHB-nY/PH-nYI

3.Packaging: packing bag

4.Compliant to the current RoHS

CUSTOMER DRAWING						Title: 2.0mm pitch WTB header
Drawn	Naihao.Wang 2021.9.6	Unit	Scale	Size	Edition	Part No.: PH-nAW(**-*)
Checked	GuoYing.Wang 2022.3.17	mm	5:1	A4	B1	Previous part No.: PH-nAW-1
		Sheet No.		1 Of 1		
Approved	Dongxu.Liu 2022.3.17	CWB 浙江台兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				
						Specification No.: PS4110

6		7		8		9		10	
General tolerance	Dimension	Tolerance	Rev. No	Location	Description			Reviser	Date
	0~3	±0.13							
	3~18	±0.23							
	18~50	±0.35							
	≥50	±0.55							

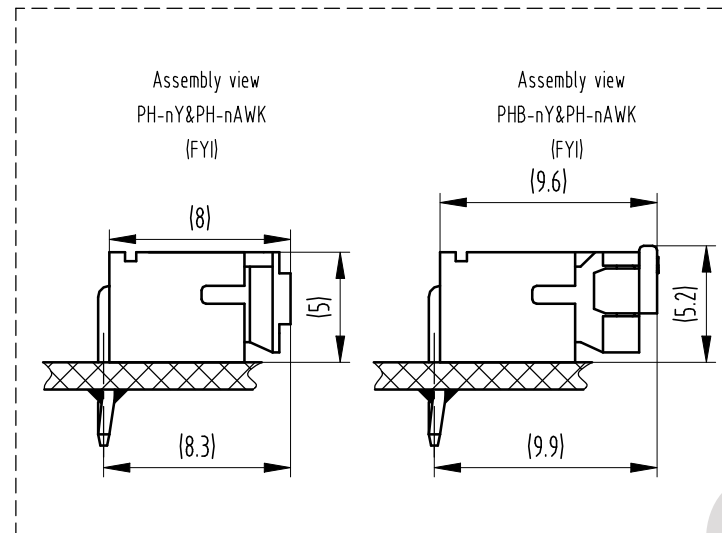
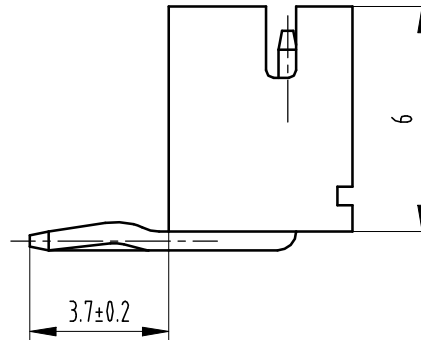


16	PH-16AW3.0	30	34
15	PH-15AW3.0	28	32
14	PH-14AW3.0	26	30
13	PH-13AW3.0	24	28
12	PH-12AW3.0	22	26
11	PH-11AW3.0	20	24
10	PH-10AW3.0	18	22
9	PH-9AW3.0	16	20
8	PH-8AW3.0	14	18
7	PH-7AW3.0	12	16
6	PH-6AW3.0	10	14
5	PH-5AW3.0	8	12
4	PH-4AW3.0	6	10
3	PH-3AW3.0	4	8
2	PH-2AW3.0	2	6
Ktts(n)	Part No.	A	B
		Dimensions	

Notes:

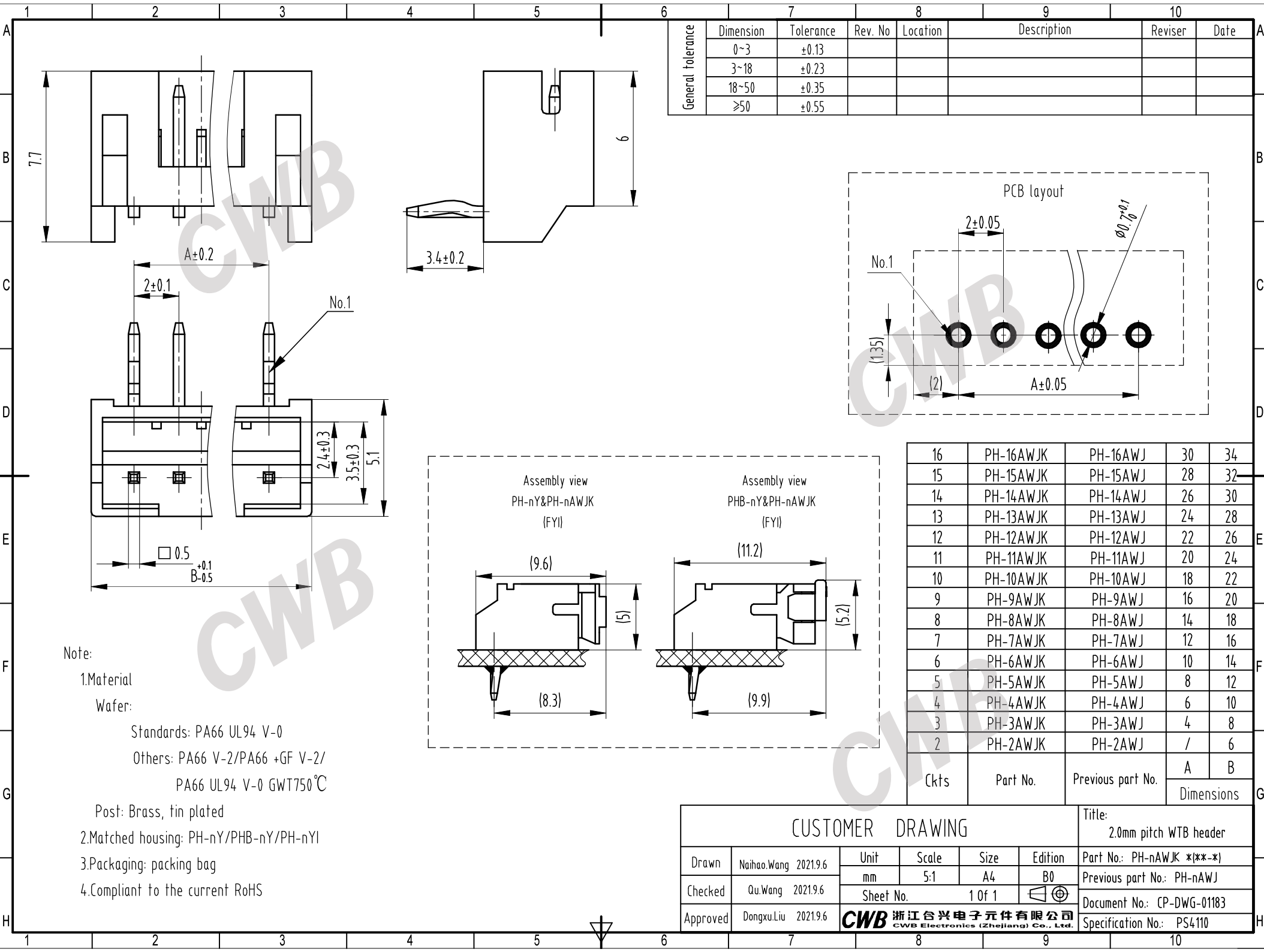
- 1.Material:
Wafer: PA66 V-0
Post: Brass, tin plated
- 2.Matched housing: PH-nY/PHB-nY/PH-nYI
- 3.Packaging: packing bag
- 4.Compliant to the current RoHS

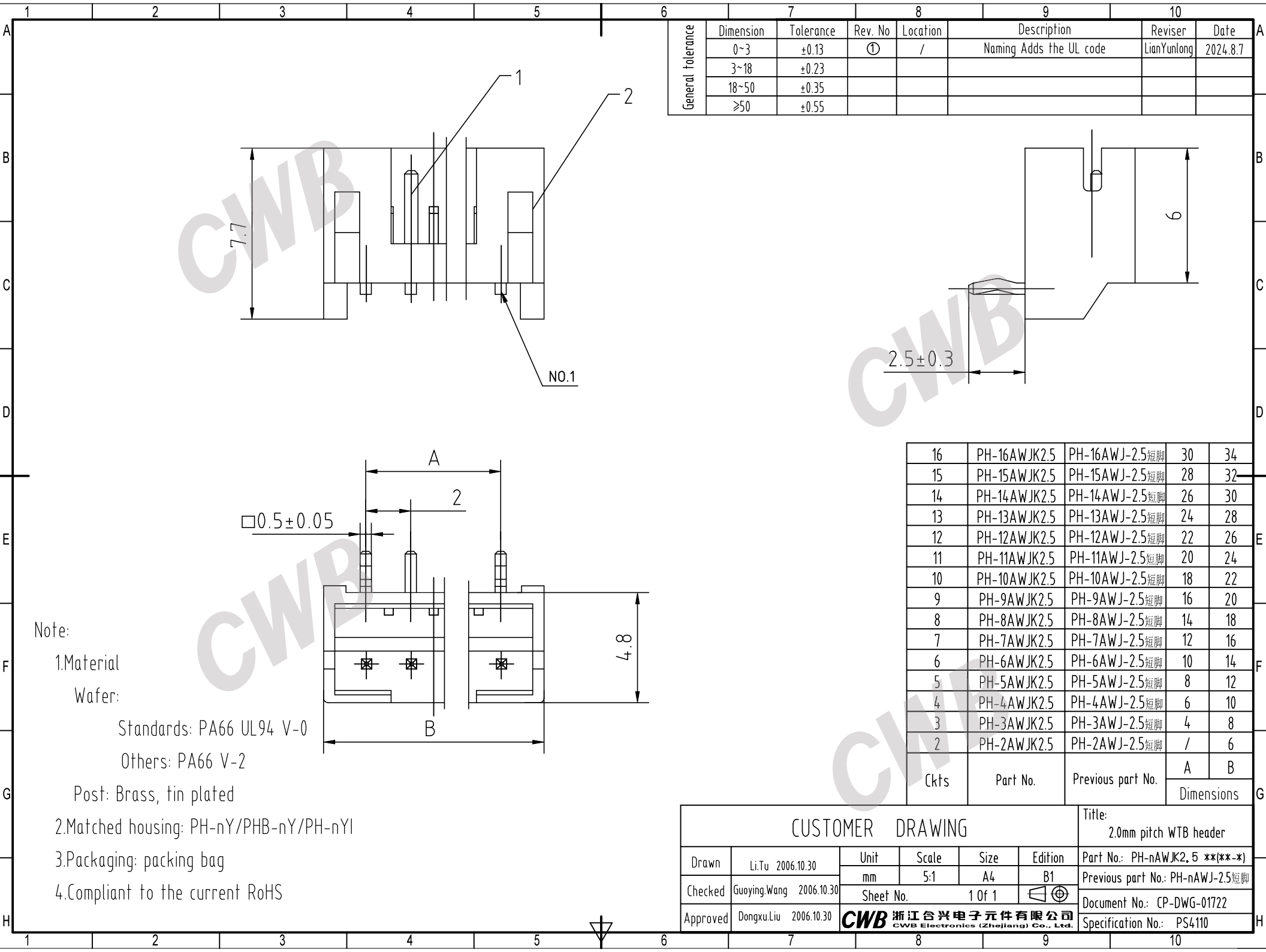
CUSTOMER DRAWING						Title: 2.0mm pitch WTB header
Drawn	Qiuqiu.Xu 2024.3.19	Unit	Scale	Size	Edition	Part No.: PH-nAW3.0(**-*)
Checked	Qu.Wang 2024.3.19	mm	5:1	A4	A0	Previous part No.: /
		Sheet No. 1 Of 1				Document No.: CP-DWG-01771
Approved	Dongxu.Liu 2024.3.19	CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				Specification No.: PS4110

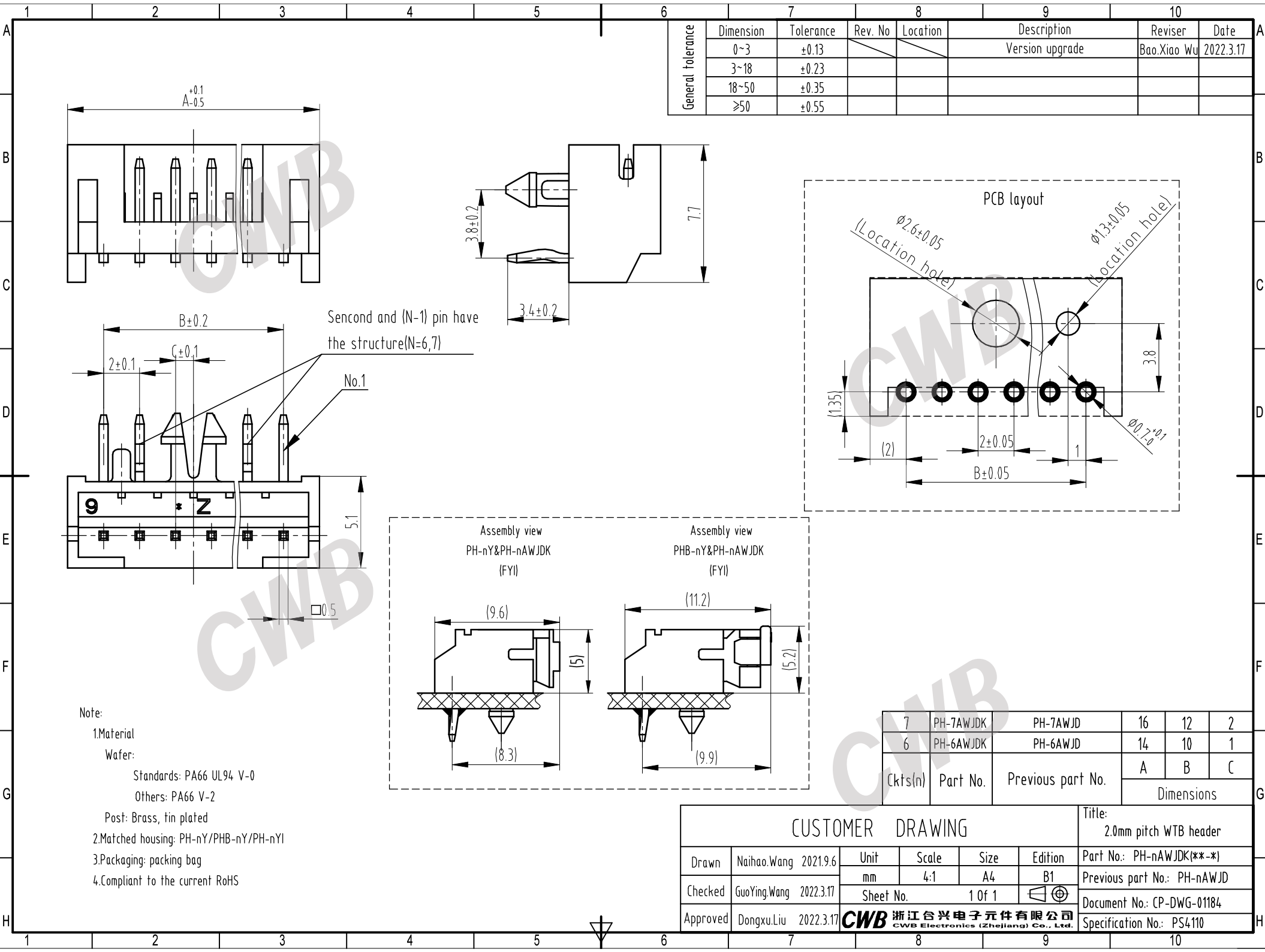


4.Compliant to the current RoHS

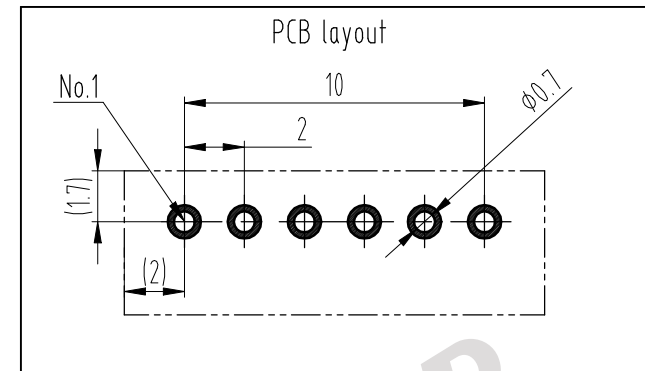
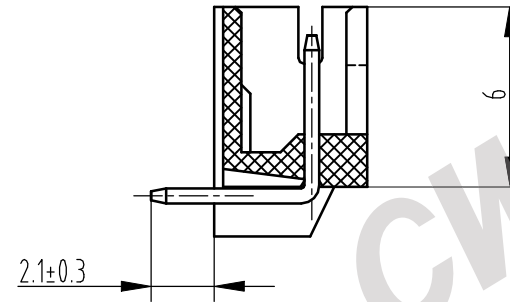
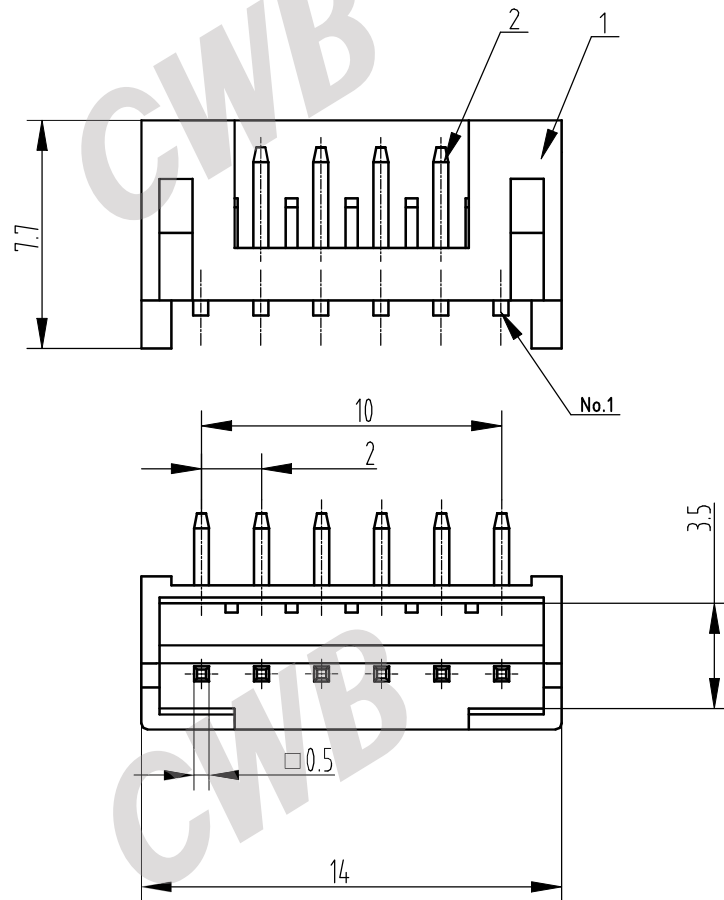
CUSTOMER DRAWING						Title: 2.0mm pitch WTB header	
Drawn	Naihao.Wang	2021.9.6	Unit	Scale	Size	Edition	Part No.: PH-nAW *(**~*)
Checked	Qu.Wang	2021.9.6	mm	5:1	A4	B0	Previous part No.: PH-nAW
			Sheet No.			1 Of 1	
Approved	Dongxu.Liu	2021.9.6	CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				Specification No.: PS4110







General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13			Version upgrade	Bao.Xiao Wu	2022.3.17
	3~18	±0.23					
	18~50	±0.35					
	≥50	±0.55					



Note:

1.Material

Wafer:

Standards: PA66 UL94 V-0

Others: PA66 V-2

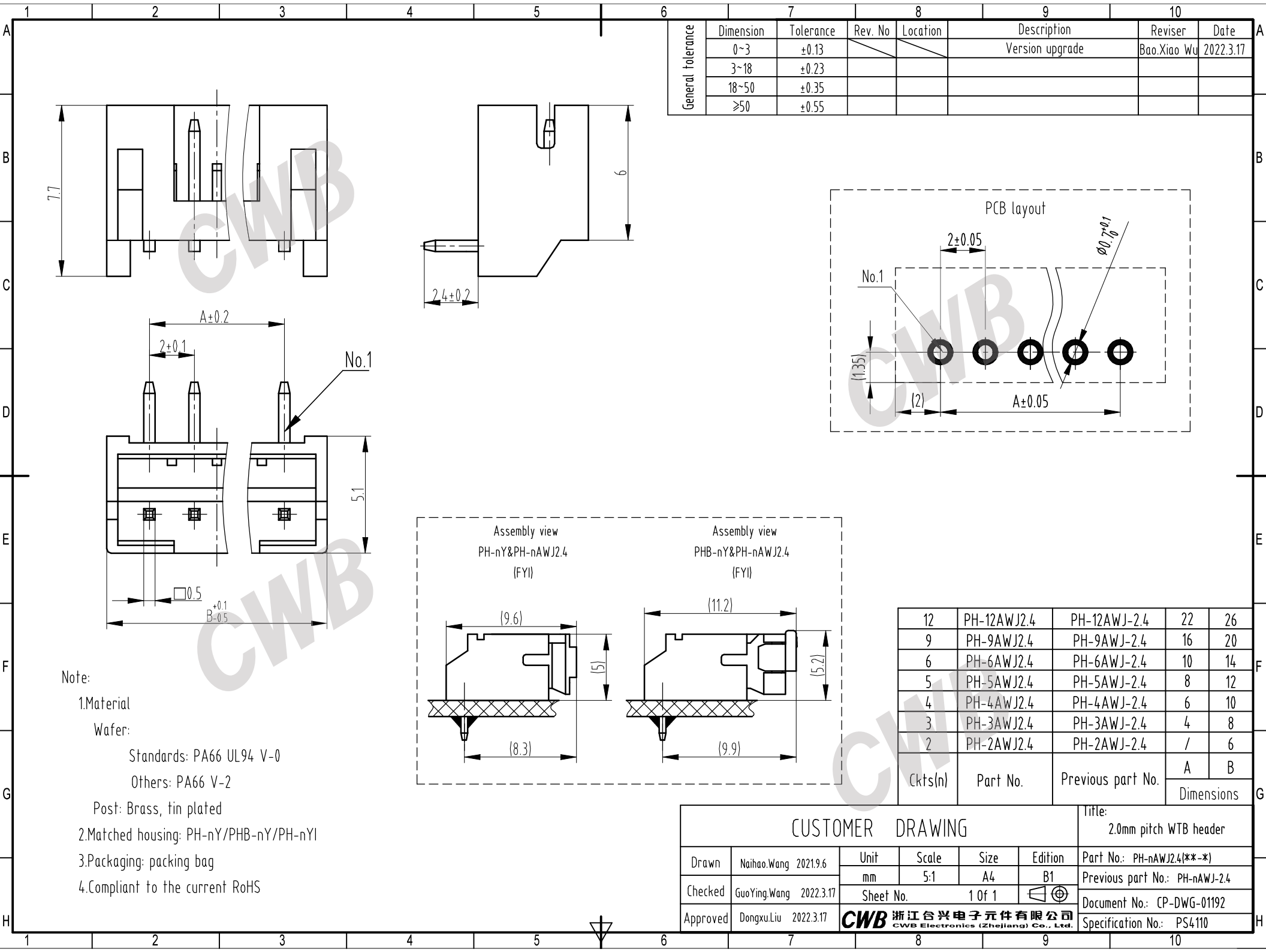
Post: Brass, tin plated

2.Matched housing: PH-nY/PHB-nY/PH-nYI

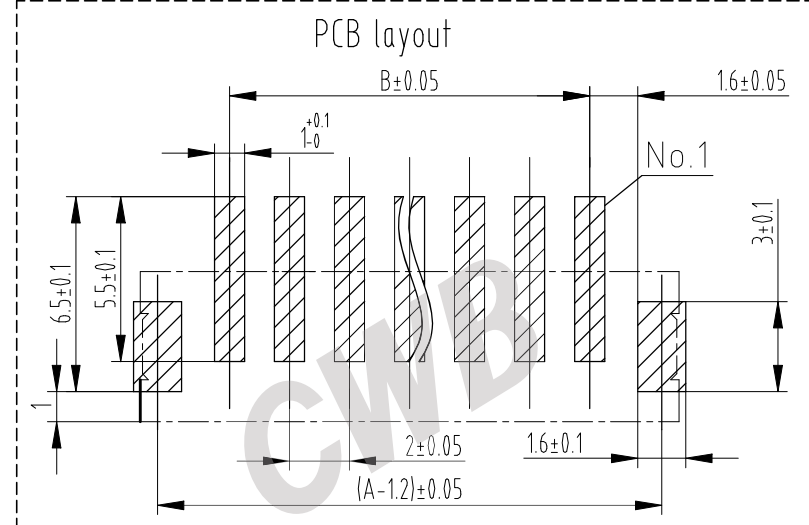
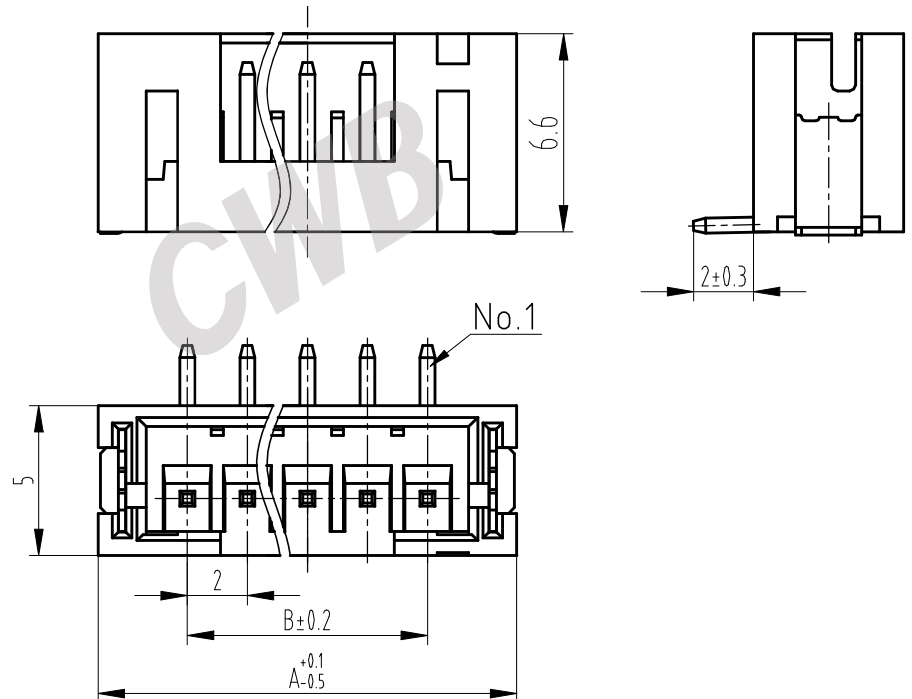
3.Packaging: packing bag

4.Compliant to the current RoHS

CUSTOMER DRAWING							Title: 2.0mm pitch WTB header	
Drawn	Heng.Yin	2022.9.15	Unit	Scale	Size	Edition	Part No.: PH-6AWJ2.1(××-×)	
			mm	5:1	A4	B1	Previous part No.: PH-6AWJ-2.1	
Checked	Guoying.Wang		2022.9.15		Sheet No. 1 Of 1		Document No.: CP-DWG-01721	
Approved	Dongxu.Liu		2022.9.15		CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.		Specification No.: PS4110	



General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13			Version upgrade	Baoxiao.Wu	2022.3.17
	3~18	±0.23			Version upgrade	Ji.Wu	2022.12.16
	18~50	±0.35					
	≥50	±0.55					



Notes:

1.Material:

Wafer:PA9T+GF UL94 V-0/
PA10T+GF UL94 V-0

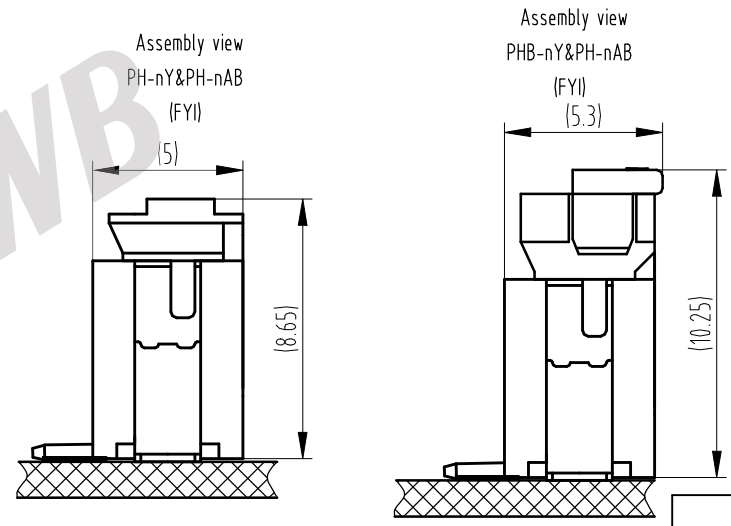
Post: Brass,tin plated

Solder tabs: Brass,tin plated

2.Matched housing: PH-nY/PHB-nY/PH-nYI

3.Packaging:Packing tube

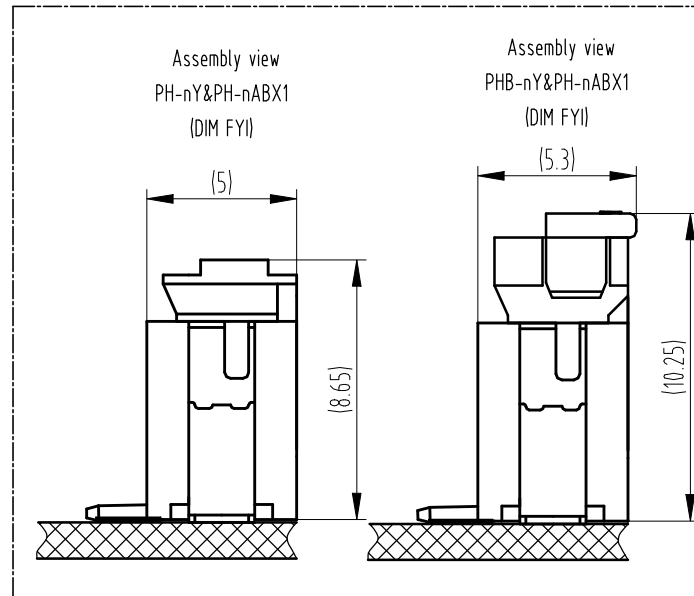
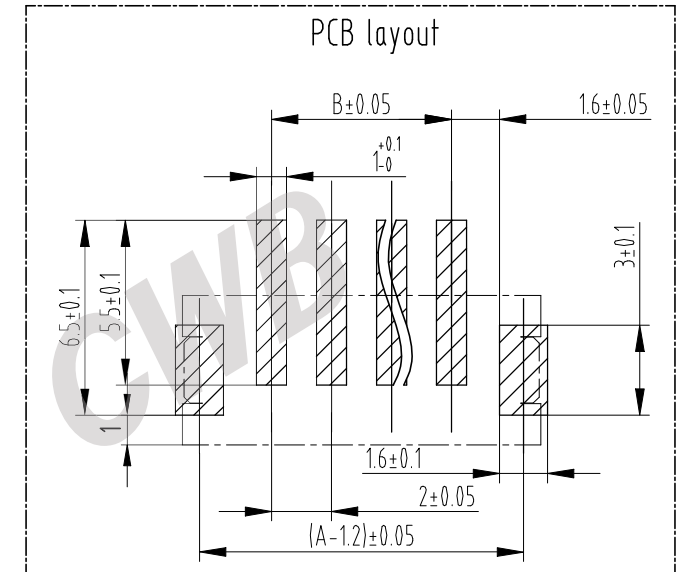
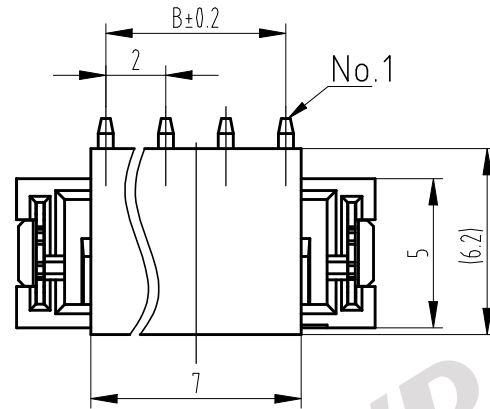
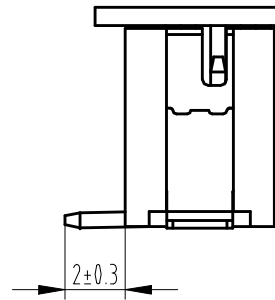
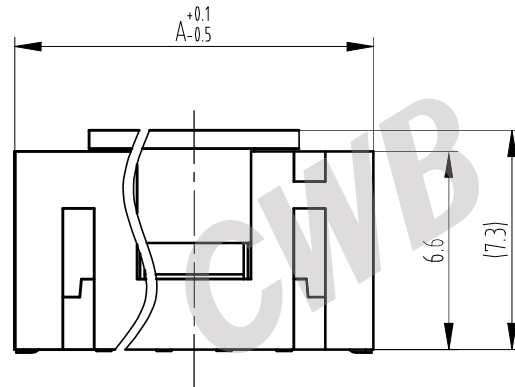
4.Compliant to the current RoHS



16	PH-16AB	PHB-16A	36	30
15	PH-15AB	PHB-15A	34	28
14	PH-14AB	PHB-14A	32	26
13	PH-13AB	PHB-13A	30	24
12	PH-12AB	PHB-12A	28	22
11	PH-11AB	PHB-11A	26	20
10	PH-10AB	PHB-10A	24	18
9	PH-9AB	PHB-9A	22	16
8	PH-8AB	PHB-8A	20	14
7	PH-7AB	PHB-7A	18	12
6	PH-6AB	PHB-6A	16	10
5	PH-5AB	PHB-5A	14	8
4	PH-4AB	PHB-4A	12	6
3	PH-3AB	PHB-3A	10	4
2	PH-2AB	PHB-2A	8	2
Ckts(n)	Part No.	Previous part No.	A	B
			Dimensions	

CUSTOMER DRAWING						Title: 2.0mm pitch WTB header	
Drawn	Naihao.Wang 2021.9.6	Unit	Scale	Size	Edition	Part No.: PH-nAB**(**-*)	
		mm	4:1	A4	/	Previous part No.: PHB-nA	
Checked	GuoYing.Wang 2022.12.16	Sheet No.		1 Of 1		Document No.: CP-DWG-01186	
Approved	Dongxu.Liu 2022.12.16	CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				Specification No.: PS4110	

General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13			Version upgrade	Bao.Xiao Wu	2022.3.17
	3~18	±0.23					
	18~50	±0.35					
	≥50	±0.55					



Notes:

1.Material:

Wafer: PA9T+GF UL94 V-0/
PA10T+GF UL94 V-0

Post: Brass,tin plated

Solder tabs: Brass,tin plated

Suction caps: PA66+GF

2.Matched housing: PH-nY/PHB-nY/PH-nYI

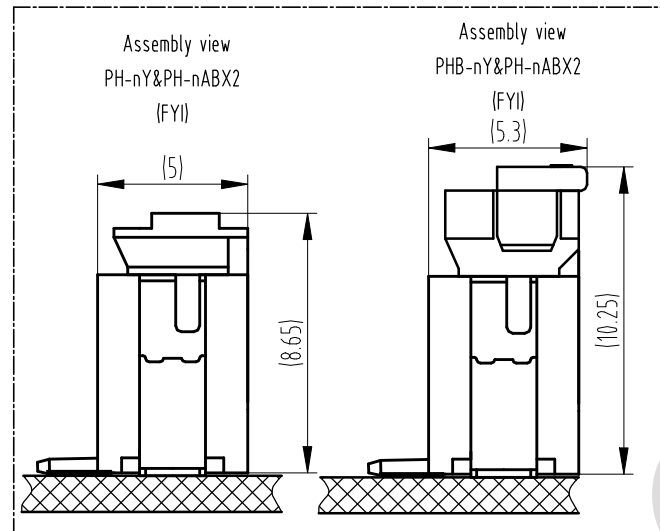
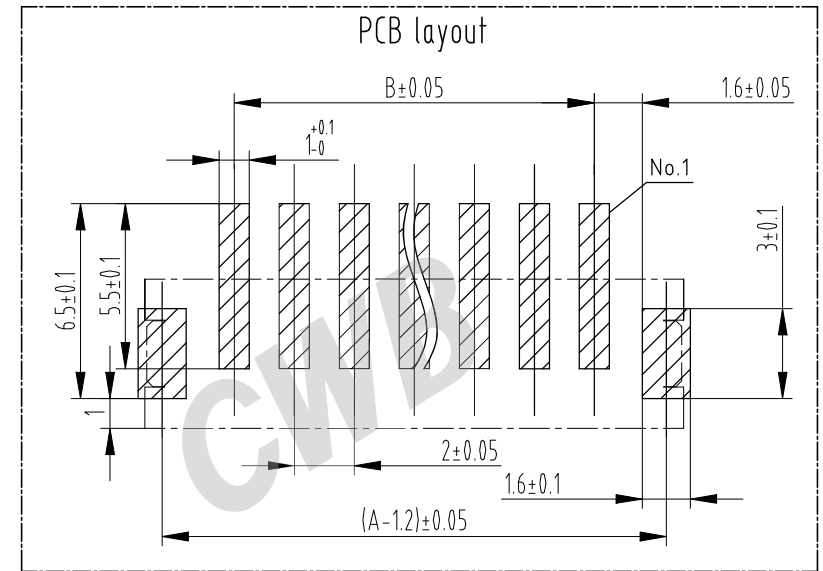
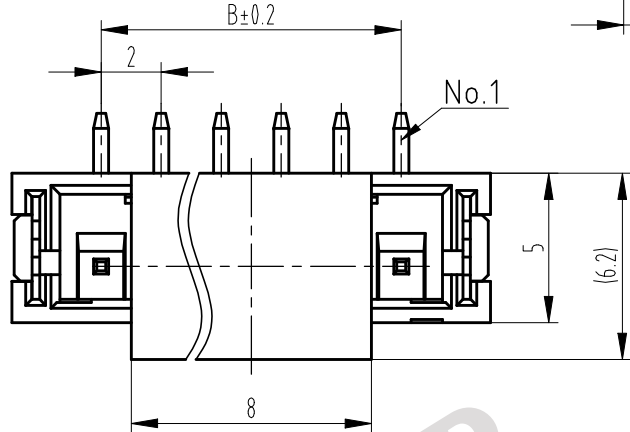
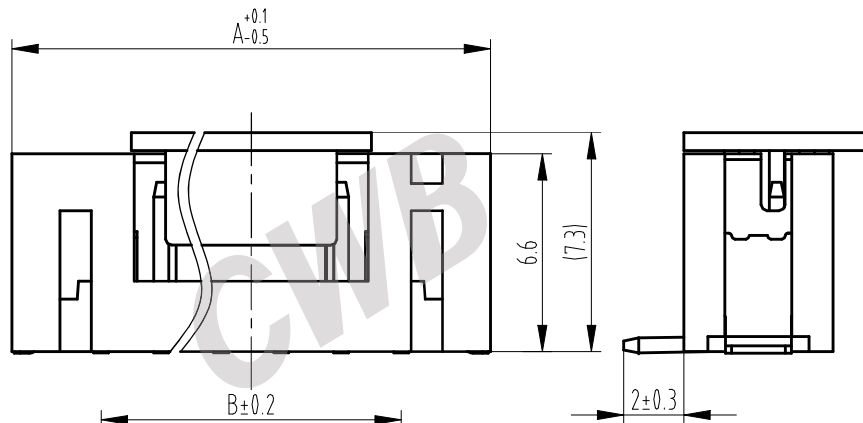
3.Packaging: Carrier tape

4.Compliant to the current RoHS

4	PH-4ABX1	PH-4AB-1	12	6
3	PH-3ABX1	PH-3AB-1	10	4
2	PH-2ABX1	PH-2AB-1	8	2
Ckts(n)	Part No.	Previous part No.	A	B
			Dimensions	

CUSTOMER DRAWING						Title: 2.0mm pitch WTB header
Drawn	Naihao.Wang 2021.9.6	Unit	Scale	Size	Edition	Part No:PH-nABX1(**-*)
Checked	GuoYing.Wang 2022.3.17	mm	4:1	A4	B0	Previous part No:PH-(2~4)AB-1
		Sheet No.		1 Of 1		Document No.: CP-DWG-01187
Approved	Dongxu.Liu 2022.3.17	CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				Specification No.: PS4110

General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13			Version upgrade	Bao.Xiao Wu	2022.3.17
	3~18	±0.23					
	18~50	±0.35					
	≥50	±0.55					



16	PH-16ABX2	PH-16AB-1	36	30
15	PH-15ABX2	PH-15AB-1	34	28
14	PH-14ABX2	PH-14AB-1	32	26
13	PH-13ABX2	PH-13AB-1	30	24
12	PH-12ABX2	PH-12AB-1	28	22
11	PH-11ABX2	PH-11AB-1	26	20
10	PH-10ABX2	PH-10AB-1	24	18
9	PH-9ABX2	PH-9AB-1	22	16
8	PH-8ABX2	PH-8AB-1	20	14
7	PH-7ABX2	PH-7AB-1	18	12
6	PH-6ABX2	PH-6AB-1	16	10
5	PH-5ABX2	PH-5AB-1	14	8
Ckts(n)	Part No.	Previous part No.	A	B
			Dimensions	

Notes:

1.Material:

Wafer: PA9T+GF UL94 V-0/

PA10T+GF UL94 V-0

Post: Brass, tin plated

Solder tabs: Brass, tin plated

2.Matched housing: PH-nY/PHB-nY/PH-nYI

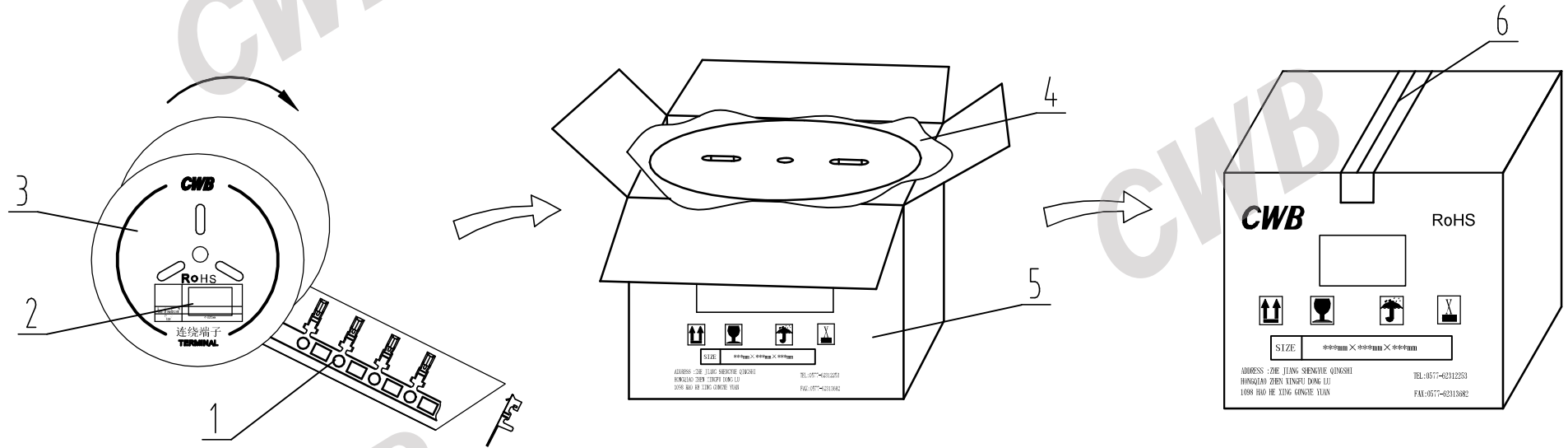
3.Packaging: Carrier tape

4.Compliant to the current RoHS

CUSTOMER DRAWING						Title: 2.0mm pitch WTB header
Drawn	Naihao.Wang 2021.9.6	Unit	Scale	Size	Edition	Part No.: PH-nABX2(**~*)
Checked	GuoYing.Wang 2022.3.17	mm	4:1	A4	B1	Previous part No.:PH-(5~16)AB-1
		Sheet No. 1 Of 1				Document No.: CP-DWG-01188
Approved	Dongxu.Liu 2022.3.17	CWB 浙江台兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				Specification No.: PS4110

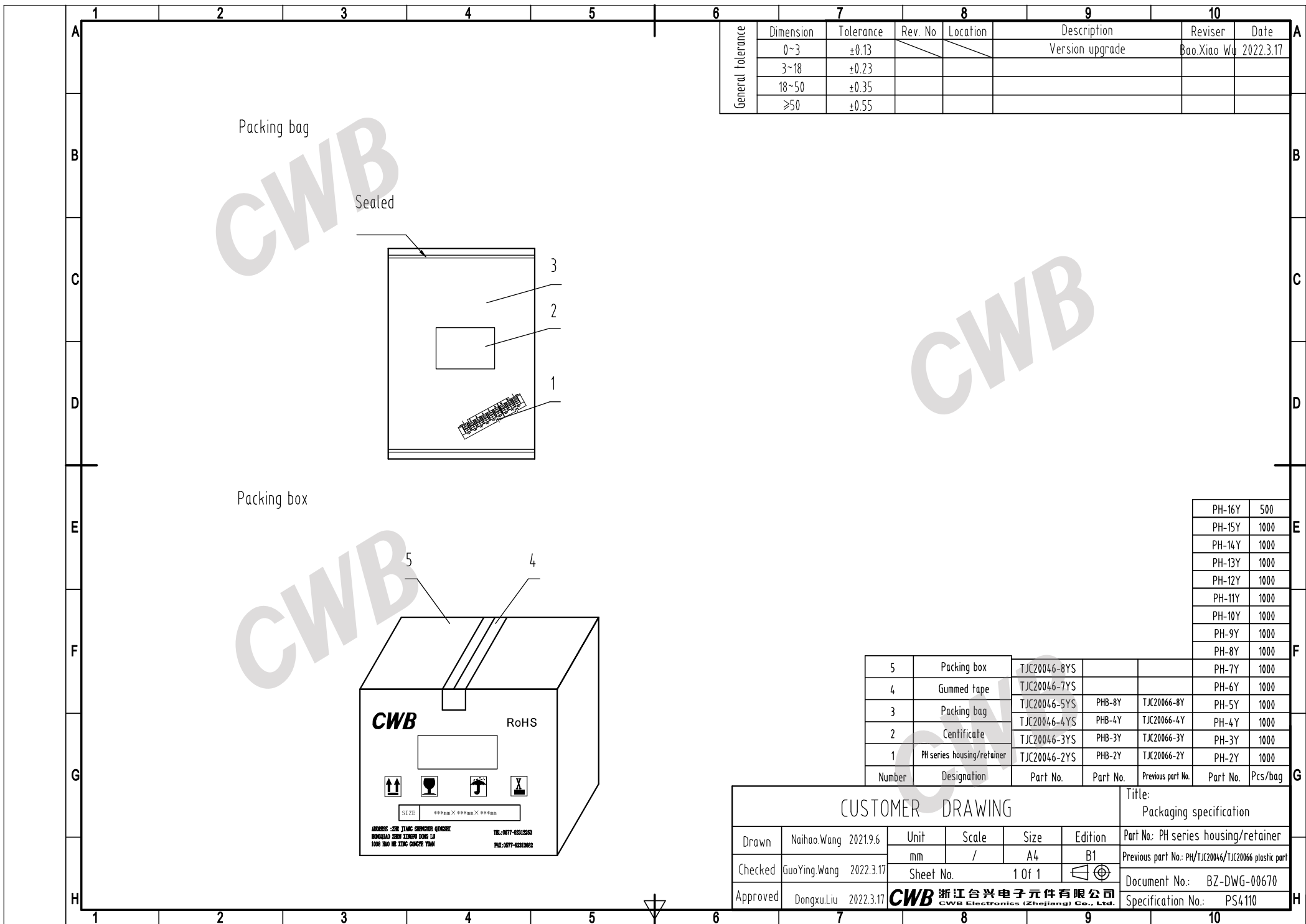
CWB 浙江台兴电子元件有限公司
CWB Electronics (Zhejiang) Co., Ltd.

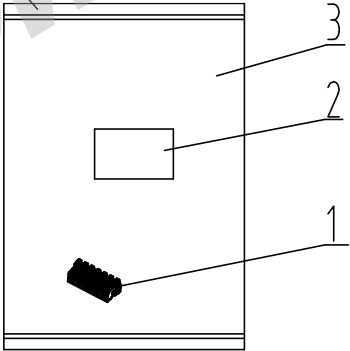
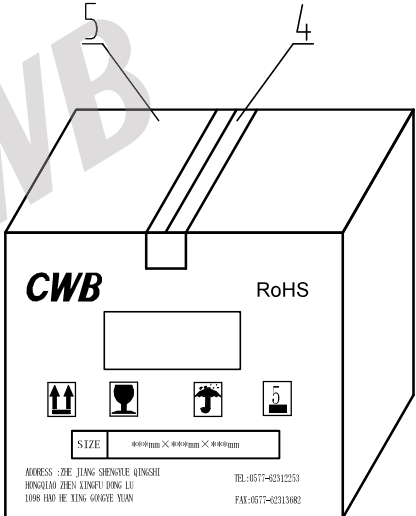
General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13			Version upgrade	BaoXiao Wu	2022.3.17
	3~18	±0.23					
	18~50	±0.35					
	≥50	±0.55					

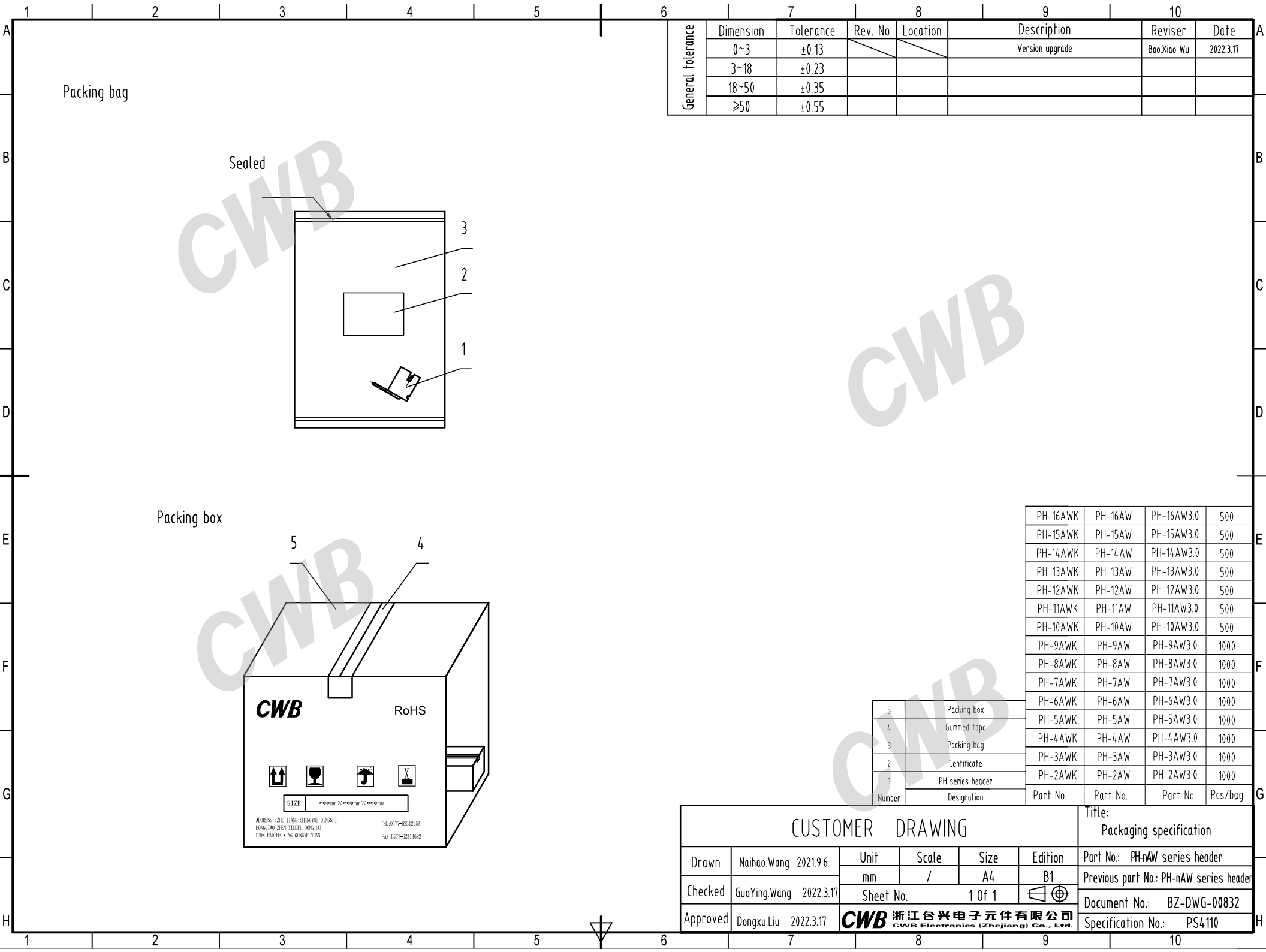


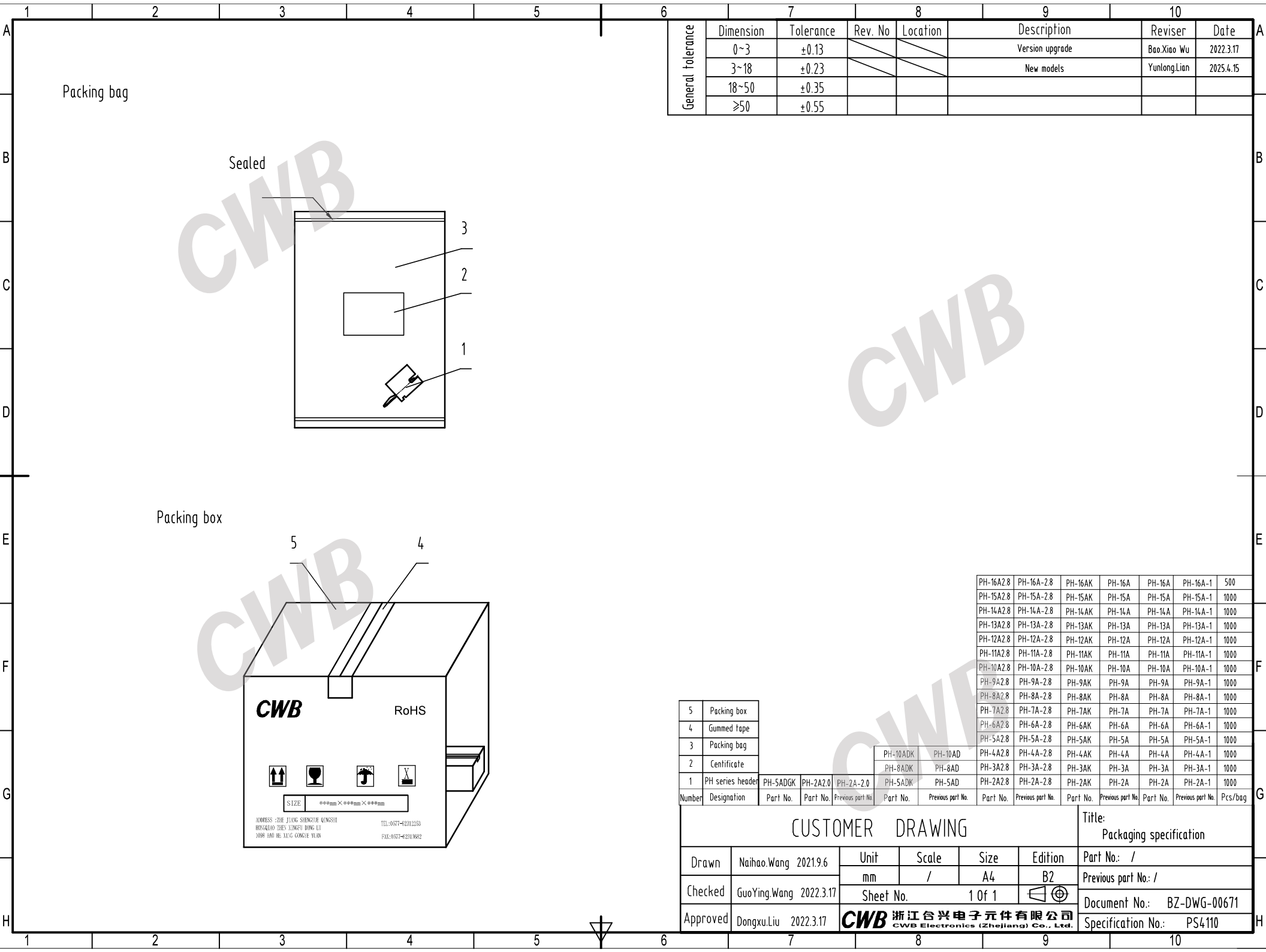
6	Gummed tape	
5	Packing box	
4	Packing bag	
3	Reel	
2	Certificate	
1	PH-3/CH-PH-3	8Kpcs/reel
	PH-1/CH-PH-1	8Kpcs/reel
	PH/CH-PH	8Kpcs/reel
Number	Designation	Remarks

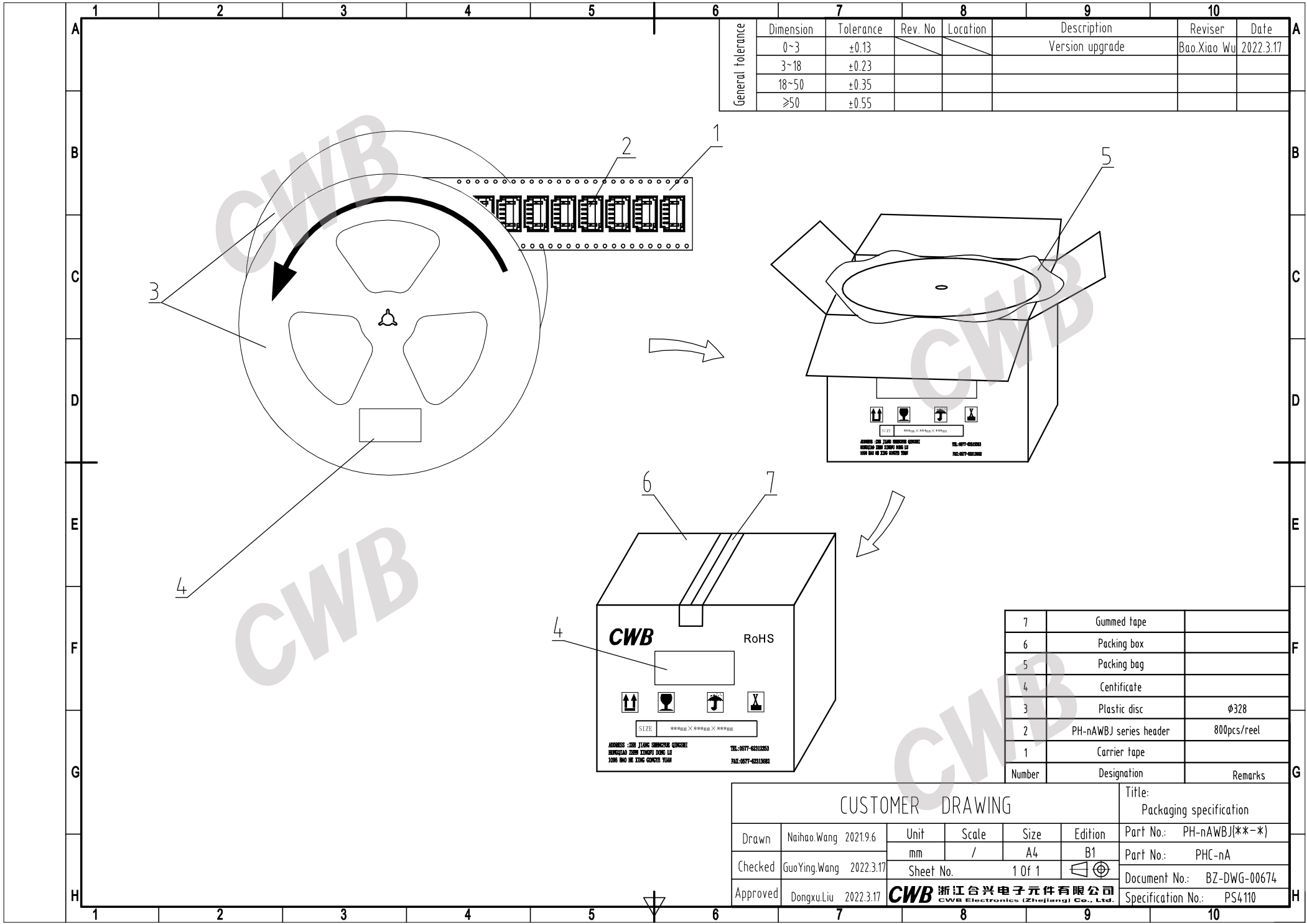
CUSTOMER DRAWING						Title: Packaging specification		
Drawn	Qu.Wang	2021.8.25	Unit	Scale	Size	Edition	Part No.: CH-PH-*/CH-PH-1-*/CH-PH-3-*	
			mm	/	A4	B1	Previous part No.: PH/PH-1/PH-3	
Checked	GuoYing.Wang	2022.3.17	Sheet No.		1 Of 1			Document No.: BZ-DWG-00669
Approved	Dongxu.Liu	2022.3.17	CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.					Specification No.: PS4110



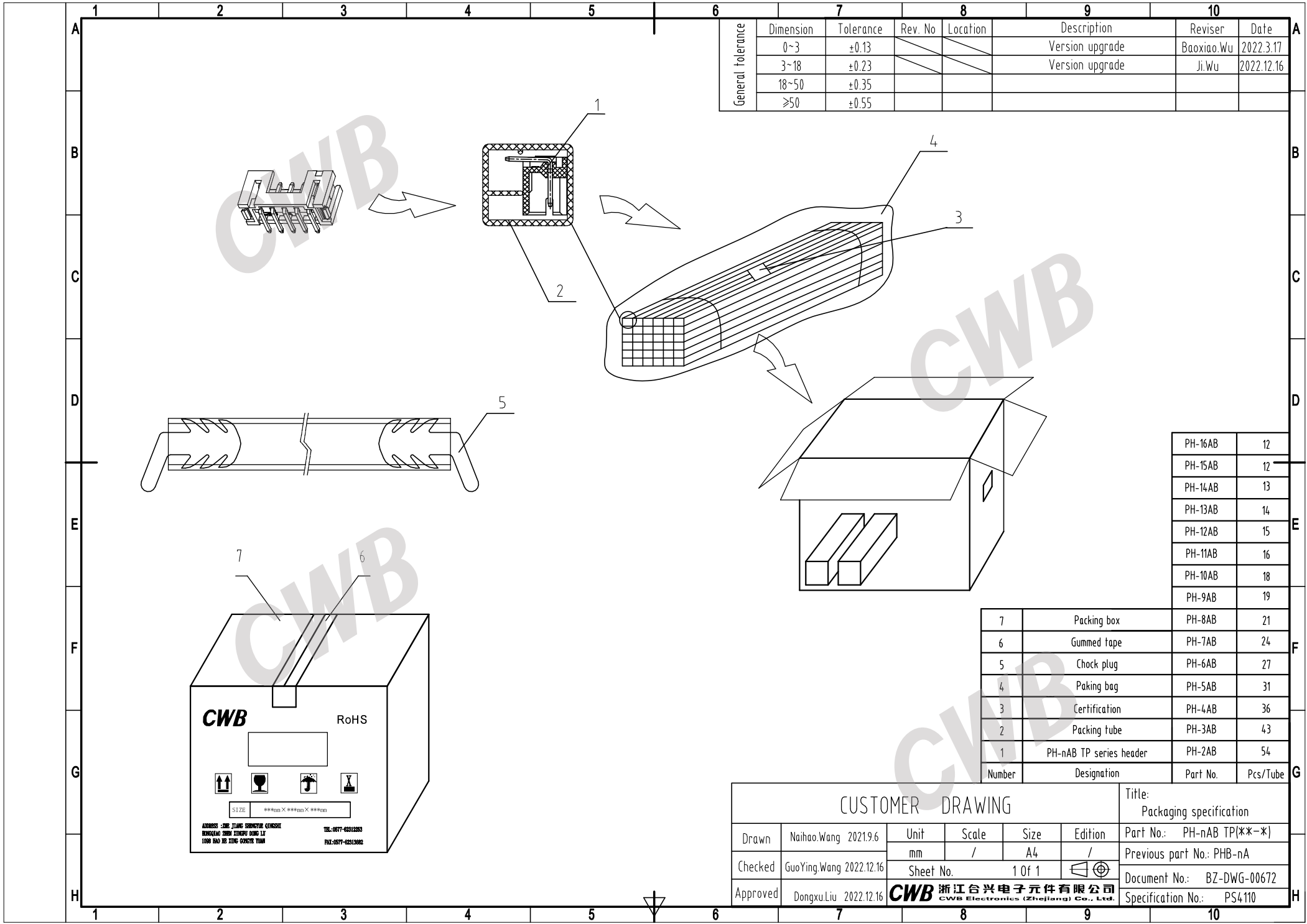
	1	2	3	4	5	6	7	8	9	10																																																																											
A						<table><tr><td rowspan="4">General tolerance</td><td>Dimension</td><td>Tolerance</td><td>Rev. No</td><td>Location</td><td>Description</td><td>Reviser</td><td>Date</td></tr><tr><td>0~3</td><td>±0.13</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>3~18</td><td>±0.23</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>18~50</td><td>±0.35</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>≥50</td><td>±0.55</td><td></td><td></td><td></td><td></td></tr></table>		General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date	0~3	±0.13						3~18	±0.23						18~50	±0.35								≥50	±0.55							A																																						
General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date																																																																														
	0~3	±0.13																																																																																			
	3~18	±0.23																																																																																			
	18~50	±0.35																																																																																			
		≥50	±0.55																																																																																		
B	Packing bag																																																																																				
C	Sealed 																																																																																				
D																																																																																					
E	Packing box																																																																																				
F																																																																																					
G	<table><tr><td>5</td><td>Packing box</td><td>PH-16YI</td><td>1000</td><td></td></tr><tr><td>4</td><td>Gummed tape</td><td>PH-15YI</td><td>1000</td><td></td></tr><tr><td>3</td><td>Packing bag</td><td>PH-14YI</td><td>1000</td><td></td></tr><tr><td>2</td><td>Certificate</td><td>PH-13YI</td><td>1000</td><td></td></tr><tr><td>1</td><td>PH-nYI</td><td>PH-12YI</td><td>1000</td><td></td></tr><tr><td></td><td></td><td>PH-11YI</td><td>1000</td><td></td></tr><tr><td></td><td></td><td>PH-10YI</td><td>1000</td><td></td></tr><tr><td></td><td></td><td>PH-9YI</td><td>1000</td><td></td></tr><tr><td></td><td></td><td>PH-8YI</td><td>1000</td><td></td></tr><tr><td></td><td></td><td>PH-7YI</td><td>1000</td><td></td></tr><tr><td></td><td></td><td>PH-6YI</td><td>1000</td><td></td></tr><tr><td></td><td></td><td>PH-5YI</td><td>1000</td><td></td></tr><tr><td></td><td></td><td>PH-4YI</td><td>1000</td><td></td></tr><tr><td></td><td></td><td>PH-3YI</td><td>1000</td><td></td></tr><tr><td></td><td></td><td>PH-2YI</td><td>1000</td><td></td></tr></table>										5	Packing box	PH-16YI	1000		4	Gummed tape	PH-15YI	1000		3	Packing bag	PH-14YI	1000		2	Certificate	PH-13YI	1000		1	PH-nYI	PH-12YI	1000				PH-11YI	1000				PH-10YI	1000				PH-9YI	1000				PH-8YI	1000				PH-7YI	1000				PH-6YI	1000				PH-5YI	1000				PH-4YI	1000				PH-3YI	1000				PH-2YI	1000	
5	Packing box	PH-16YI	1000																																																																																		
4	Gummed tape	PH-15YI	1000																																																																																		
3	Packing bag	PH-14YI	1000																																																																																		
2	Certificate	PH-13YI	1000																																																																																		
1	PH-nYI	PH-12YI	1000																																																																																		
		PH-11YI	1000																																																																																		
		PH-10YI	1000																																																																																		
		PH-9YI	1000																																																																																		
		PH-8YI	1000																																																																																		
		PH-7YI	1000																																																																																		
		PH-6YI	1000																																																																																		
		PH-5YI	1000																																																																																		
		PH-4YI	1000																																																																																		
		PH-3YI	1000																																																																																		
		PH-2YI	1000																																																																																		
H	<table><tr><td colspan="2">CUSTOMER DRAWING</td><td colspan="2">Title: Packaging specification</td></tr><tr><td>Drawn</td><td>Pei Yang 2022.05.24</td><td>Unit</td><td>Scale</td><td>Size</td><td>Edition</td><td>Part No.: PH-nYI(**-*)</td></tr><tr><td rowspan="2">Checked</td><td rowspan="2">Guoying Wang 2022.05.24</td><td>mm</td><td>/</td><td>A4</td><td>B1</td><td>Previous part No.: /</td></tr><tr><td colspan="2">Sheet No. 1 Of 1</td><td colspan="2"></td></tr><tr><td>Approved</td><td>Dongxu Liu 2022.05.25</td><td colspan="2">CWB 浙江合兴电子元件有限公司</td><td colspan="3">Document No.: BZ-DWG-00857</td></tr><tr><td colspan="2"></td><td colspan="2">CWB Electronics (Zhejiang) Co., Ltd.</td><td colspan="3">Specification No.: PS4110</td></tr></table>						CUSTOMER DRAWING		Title: Packaging specification		Drawn	Pei Yang 2022.05.24	Unit	Scale	Size	Edition	Part No.: PH-nYI(**-*)	Checked	Guoying Wang 2022.05.24	mm	/	A4	B1	Previous part No.: /	Sheet No. 1 Of 1				Approved	Dongxu Liu 2022.05.25	CWB 浙江合兴电子元件有限公司		Document No.: BZ-DWG-00857					CWB Electronics (Zhejiang) Co., Ltd.		Specification No.: PS4110					H																																								
CUSTOMER DRAWING		Title: Packaging specification																																																																																			
Drawn	Pei Yang 2022.05.24	Unit	Scale	Size	Edition	Part No.: PH-nYI(**-*)																																																																															
Checked	Guoying Wang 2022.05.24	mm	/	A4	B1	Previous part No.: /																																																																															
		Sheet No. 1 Of 1																																																																																			
Approved	Dongxu Liu 2022.05.25	CWB 浙江合兴电子元件有限公司		Document No.: BZ-DWG-00857																																																																																	
		CWB Electronics (Zhejiang) Co., Ltd.		Specification No.: PS4110																																																																																	
	1	2	3	4	5	6	7	8	9	10																																																																											

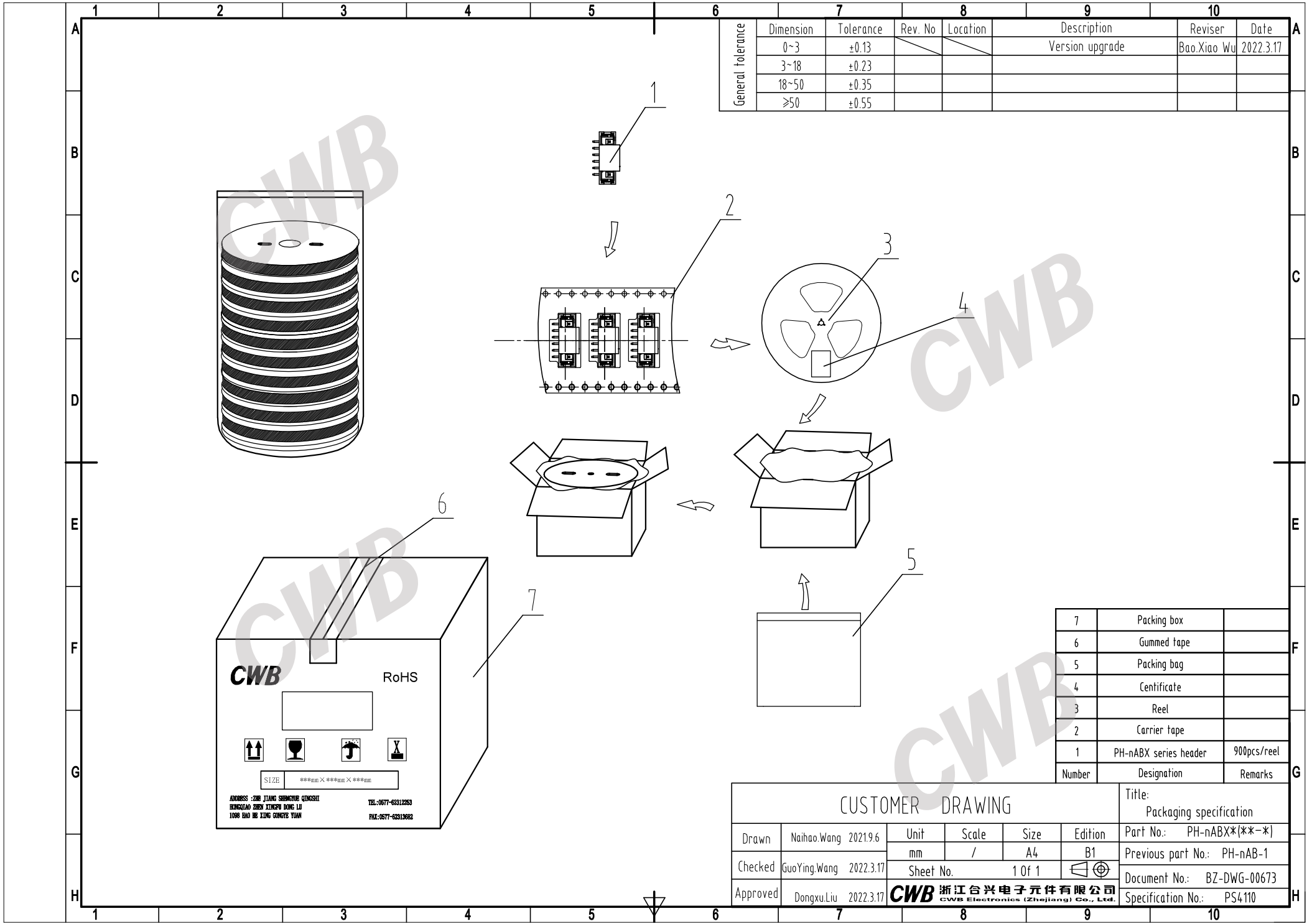






7	Gummed tape	
6	Packing box	
5	Packing bag	
4	Certificate	
3	Plastic disc	φ328
2	PH-nAWBJ series header	800pcs/reel
1	Carrier tape	
Number	Designation	Remarks



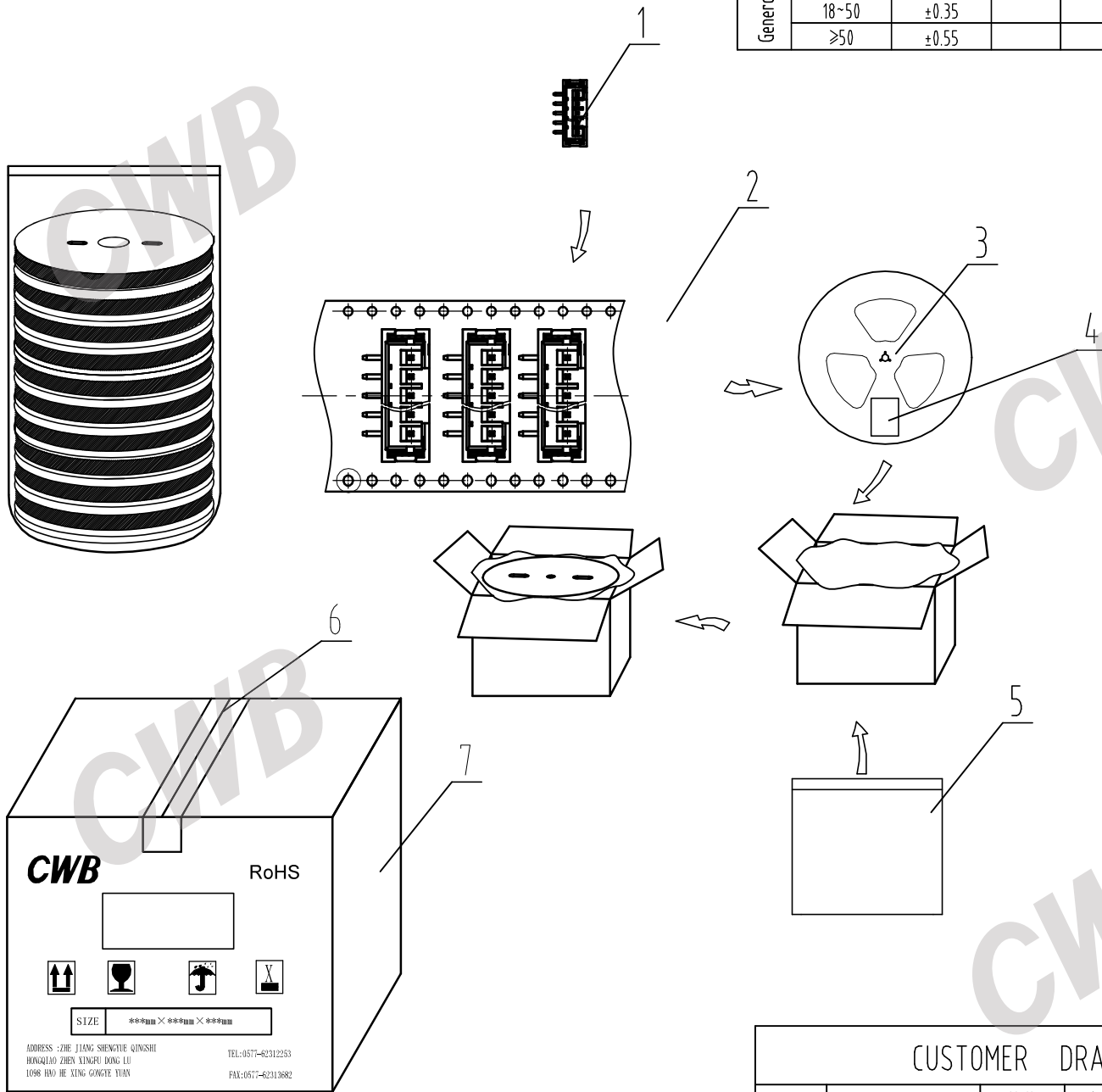


General Tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13			Version upgrade	Bao.Xiao Wu	2022.3.17
	3~18	±0.23					
	18~50	±0.35					
	≥50	±0.55					

7	Packing box	
6	Gummed tape	
5	Packing bag	
4	Certificate	
3	Reel	
2	Carrier tape	
1	PH-nABX series header	900pcs/reel
Number	Designation	Remarks

CUSTOMER DRAWING						Title: Packaging specification	
Drawn	Naihao.Wang	2021.9.6	Unit	Scale	Size	Edition	Part No.: PH-nABX*(**~*)
Checked	GuoYing.Wang	2022.3.17	mm	/	A4	B1	Previous part No.: PH-nAB-1
Approved	Dongxu.Liu	2022.3.17	Sheet No.	1 Of 1			Document No.: BZ-DWG-00673
CWB 浙江台兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.							Specification No.: PS4110

General tolerance	Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13					
	3~18	±0.23					
	18~50	±0.35					
	≥50	±0.55					



7	Packing box	
6	Gummed tape	
5	Packing bag	
4	Certificate	
3	Reel	
2	Carrier tape	
1	NTC003 Assy	1000pcs/reel
Number	Designation	Remarks

CUSTOMER DRAWING						Title: Packaging specification	
Drawn	Jiebin.Hu 2023.5.6	Unit	Scale	Size	Edition	Part No.: PH-nAB (**-*)	
		mm	/	A4	/	Previous part No.: PH-nAB	
Checked	Qu.Wang 2023.5.6	Sheet No.		1 Of 1		Document No.: BZ-DWG-00892	
Approved	Dongxu.Liu 2023.5.6	CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.				Specification No.: PS4110	

PH 系列命名规则

PH series naming conventions

1. Contact

CH-PH-*-*

CH - PH - * - * *

↓

↓

↓

↓

Plating type: none...Bright tin

Manufacture sequence: none...standards, plated before stamping

C...stamping before plated

Barrel mark: none...AWG#26~AWG#24

1...AWG#28

3...AWG#28~AWG#24

Series name

Contact category: CH...Socket Contact

2. Housing

PH-nY **(**-*), PHB-nY **(**-*)

PH B - n Y * (WT * -*)

↓

↓

↓

↓

↓

Flammability: None...UL94 V-0, -2...V-2

Material: None...PA66, 1...PA66+GF

Color: WT...White, BK...Black, GN...Green, BL...Blue, RD...Red,

YW...Yellow, OG...Orange, BN...Brown, GY...Gray, NL...Natural,

DGN...Dark Green, DBL...Dark Blue, DRD...Dark Red, DYW...Dark

Yellow, DOG...Dark Orange

Glow wire: None...Standards, GW...GWT 750℃

Product category: Y...Housing or plug housing

No. of circuits: PH...2~16, PHB...2~4,8

Structure: None...standard parts, B...nonstandard part

Series name

3. Receptacle

PH-nYI(**-*)

PH - n Y * * (NL * -*)

↓

Series name

↓

No. of circuits: 2~16

↓

Product category: Y...Housing or plug housing

↓

Mounting type : I... IDC Conn

↓

Glow wire: GW...GWT 750℃

↓

Color: GY...Gray, BL...Blue, YW...Yellow, RD...Red, BN...Brown, BK...Black, DGN...Dark Green, DBL...Dark Blue, DRD...Dark Red, DYW...Dark Yellow, DOG...Dark Orange

↓

Material: 2~16PIN: None...PA66, 13~16PIN:1...PA66+GF

↓

Flammability: None...UL94 V-0,

4. Retainer

TJC20046 -nYS(**-*)

TJC20046 - n YS (NL * -*)

↓

Series name

↓

No. of circuits: YS...2~5,7,8

↓

Product category: YS...Retainer

↓

Color: WT...White, BK...Black, GN...Green, IV...Ivory, GN...Green

↓

Material: None...PA66

↓

Flammability: None...UL94 V-0

PH-nAK (**-*), PH-nA (**-*), PH-nA2.0 (**-*), PH-nA2.8 (**-*), PH-nAWK (**-*),
PH-nAW(**-*), PH-nAW3.0(**-*), PH-nADK(**-*), PH-nAWJK (**-*), PH-nAWJK2.5 **(**-*),
PH-nAWJ2.1(**-*), PH-nAWJ2.4(**-*), PH-nAWJDK(**-*), PH-nADGK (***)

↓ Flammability: None...UL94 V-0, -2...V-2.
 ↓ Material: None...PA66, 1...PA66+GF.
 Color: WT...White, BK...Black, GN...Green, BL...Blue, RD...Red,
 YW...Yellow, OG...Orange, VT...Violet, GY...Gray, NL...Natural,
 DGN...Dark Green, DBL...Dark Blue, DRD...Dark Red, DYW...Dark
 Yellow, DOG...Dark Orange
 ↓ Glow wire: None...normal, GW...GWT 750°C.
 ↓ UL mark: None...standards, UL...UL certification
 Post length: None...Standards, nonstandard : 2.0mm, 2.1mm, 2.4mm,
 2.5mm, 2.8mm, 3.0mm...
 ↓ Structure mark: None...Standard, D...With boss, J...With PCB stabilizer,
 K...With Kink .G...High box type
 ↓ Installation direction: None...Top entry type, W...Side entry type.
 ↓ Product category: A...Header.
 No. of circuits: AK/A...2~16; A2.8...2~16; AWK/AW...2~16; ADK...5, 8, 10; AWJK...2~16;
 AWJK 2.4...2~6, 9, 12; AWJDK...6, 7; ADGK...5

6. SMT Header

PH - n A * * * * * (NL * - *)

↓ Flammability: None...UL94 V-0
↓ Material: 9...PA9T+GF, 14...PA10T+GF
↓ Color: NL...Natural
↓ None...Carrier tape; TP...Packing tube
↓ Structure mark2 :None...Without cover; X1... With cover 1; X2... With cover 2
↓ Structure mark1: None...Standard, D...With boss, J...With PCB stabilizer
↓ Mounting mark: B...SMT
↓ Installation direction: None...Top entry type, W...Side entry type
↓ Product category: A...Header
↓ No. of circuits: 2~16

Series name

PH-nAmZ(a.b...) * (**-*), PH-nAWKmZ(a.b...) * (**-*),
 ...n A ... mZ (a.b...)...
 ↓ ↓ ↓
 Missing circuit
 No. of actual circuits:
 Product category: A...Hea
 No. of circuits: 2~16

Part No.	
...13A ... 7Z(2.3.5.7.9.11)...	
...4A ... 3Z(2)...	
.....	