



产品规格书

PRODUCT SPECIFICATION

产品描述: TRT5.3 系列圆形接线片

Product Description: TRT5.3 Series Ring Tongue Terminal

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CWB 浙江合兴电子元件有限公司 CWB Electronics (Zhejiang) Co., Ltd.	制定 Edit: 杨培 2019.01.23	产品名称 Product Name: TRT5.3 系列
	审核 Check: 王国英 2019.01.23	编号 Document No.: PS3950
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: 86-577-62313682	批准 Approval: 刘冬旭 2019.01.23	版本 REVISION: 3



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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	旧版规格书 PS1344/PS3846	新版规格书 PS3950	2017.01.17
2	2	/	参数页标准化	2018.04.09
3	3	/	更改图纸商标 LOGO	2019.01.23
4				
5				
6				
7				

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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 TRT5.3 系列圆形接线片，产品名称：TRT5.3×0.5A1& TRT5.3×0.5A2。

This product specification covers the requirements for TRT5.3 series ring tongue terminal, which is designed and manufactured by CWB Electronics(ZheJiang) Co.,LTD. P/N: TRT5.3×0.5A1& TRT5.3×0.5A2.

3.产品描述 Product Description

TRT5.3 系列产品为家电连接器产品，产品部件组成如下：

TRT5.3 series of products for electrical products, product components are as follows:

Name	Part name	Notes
端子 Terminal	TRT5.3×0.5A1	Brass, Tin over nickel plated
端子 Terminal	TRT5.3×0.5A2	Brass, Tin 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 《产品及其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 J1150001-2010 Class I or customer's requests.

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5. 参数范围 Parameter Ratings:

额定电流 Rated Current	AWG22#	AWG20#	AWG 18#	AWG 16#	AWG 14#
	3A	5A	7A	10A	15A
额定电压 Rated Voltage	250V [AC(有效值 rms)/DC]				
使用温度范围 Operating temperature range	-40℃~+105℃(含温度上升)				
适用线型 Applicable wires	TRT5.3×0.5A1	Wire Size: AWG 22~AWG 20 (0.33 mm ² -0.52 mm ²) Insulation Diameter: 1.6mm-1.8mm			
	TRT5.3×0.5A2	Wire Size: AWG 18~AWG 14 (0.82 mm ² -2.08 mm ²) Insulation Diameter: 2.05mm-3.5mm			

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	金属件表面无锈蚀、氧化、无明显的机械损伤等缺陷。 Metal part: bright and even surface without rust, oxide, fog and obvious physical damage defects is accepted
6.1.2	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25±3mm/min; Fix the crimped terminal, Axial pull out force on the terminal in the wire at a rate less than 25±3 mm/min. GB/T5095.8 Method 16d / EIA-364-08B	AWG 22#: 40N Min. AWG 20#: 58N Min. AWG 18#: 89N Min. AWG 16#: 133.5N Min. AWG 14#: 222.5N Min.

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PRODUCT SPECIFICATION

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	使试验样品于 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 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										
6.2.2	耐低温 Cold Resistance	使试验样品于 -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 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										
6.2.3	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。 Make samples 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)										
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)℃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 5 个循环,恢复 2h 后检查。 Mated connectors shall be tested under the following conditions <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Temperature °C</th> <th style="text-align: left;">Duration (Minutes)</th> </tr> </thead> <tbody> <tr> <td>a -55</td> <td>30</td> </tr> <tr> <td>b +25</td> <td>5Max.</td> </tr> <tr> <td>c +85</td> <td>30</td> </tr> <tr> <td>d +25</td> <td>5Max.</td> </tr> </tbody> </table> Step a to d is one cycle, 5 cycles shall be tested. Recovery time 2 hours. GB/T 5095.6 method 11d / EIA-364-32C	Temperature °C	Duration (Minutes)	a -55	30	b +25	5Max.	c +85	30	d +25	5Max.	外观：无损伤（参照 6.1.1） Appearance: No damage.(refer to 6.1.1)
Temperature °C	Duration (Minutes)												
a -55	30												
b +25	5Max.												
c +85	30												
d +25	5Max.												

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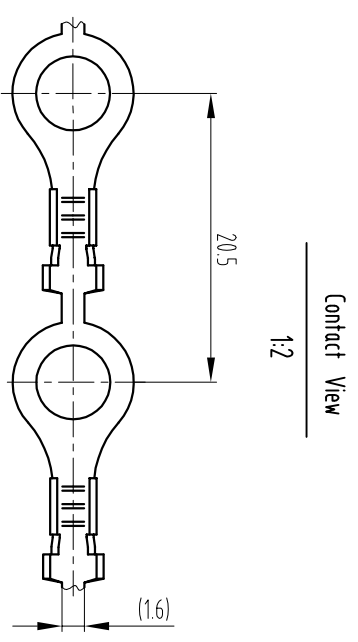
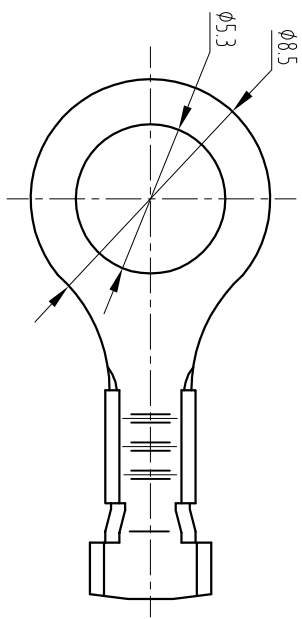
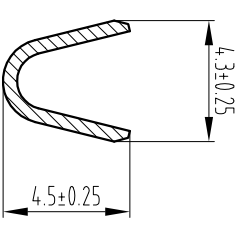
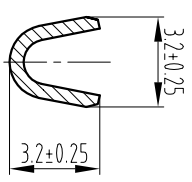
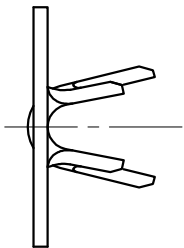
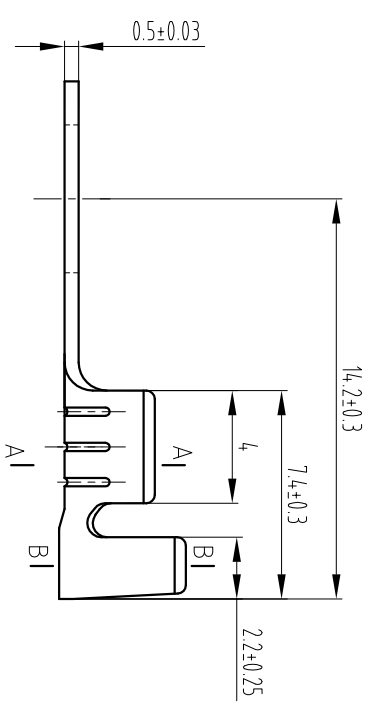
6.2.5	盐雾 Salt Spray	<p>把试验样品从试验箱顶悬挂下来，采用浓度为(5±1)%(质量百分比)的氯化钠溶液，在(35±2)℃温度下连续雾化 48h,试验后用流动的蒸馏水轻轻洗去表面沉积物。在常温常湿条件下恢复 1~2h</p> <p>48 hours spray, at temp 35+/-2°C, Salt NaCl mist (5±1)% After test wash parts and return to room ambient for 2 hours</p> <p>GB/T 5095.6 Method 11f /EIA-364-26B</p>	<p>外观：无损伤(五金件应无露出底金属的严重锈蚀。)</p> <p>Appearance: No Damage (No erosion with material exposed.)</p>
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7.测试分组 Test Sequences (Samples: 5PCS)

测试组 GROUP NUMBER	A	B	C	D	E	F
外观 Appearance	1	1,3	1,3	1,3	1,3	1,3
压着部位抗张强度 Crimping Pull Out Force	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

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General Tolerance				Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	±0.13	1	H8	To update the content	Yang Pei	2019.01.23			
	3~18	±0.16								
	18~50	±0.31								
	≥50	±0.55								



Notes:

- 1.Material: Brass, Thickness=0.5mm;
- 2.Surface Finish: Tin over nickel plated;
- 3.Applicable Wires: AWG22~AWG20;
- 4.Compliant To The Current RoHS.

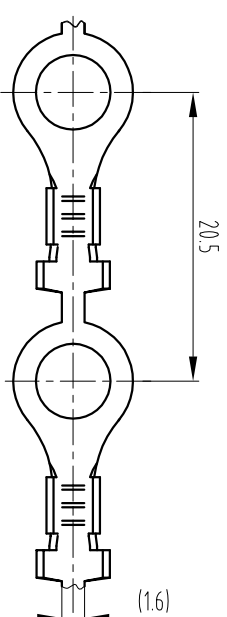
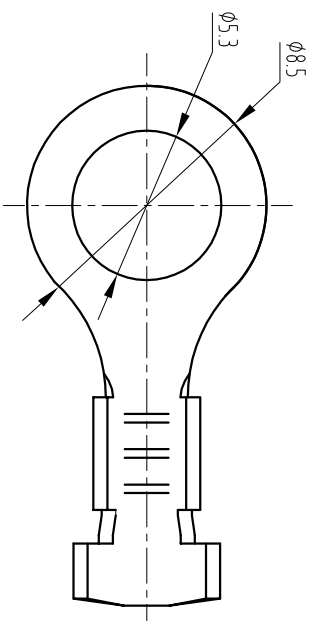
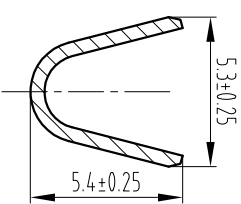
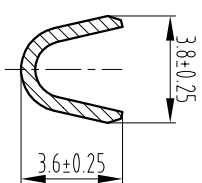
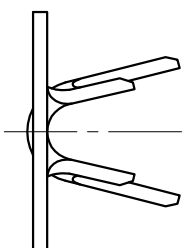
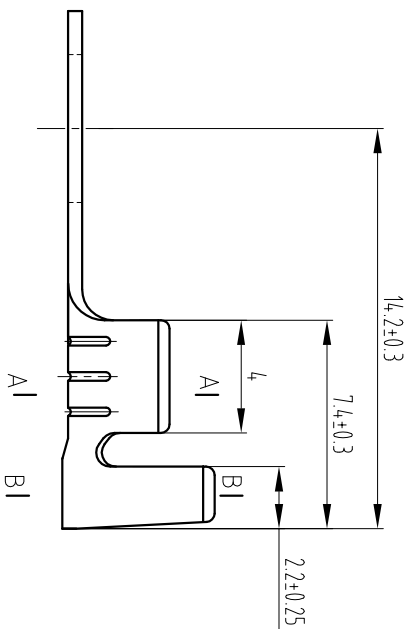
CUSTOMER DRAWING

Drawn	Lian	2017.01.17	Unit	mm	Scale	4:1	Size	A4	Edition	B	Title	5.3x0.5 ring tongue terminal
Checked	Guoying Wang	2017.01.17	Sheet No.	1 of 1							Part No.:	TR15.3x0.5A1
Approved	Dongxuliu	2017.01.17									Document No.:	CP-DWG-00433
											Specification No.:	PS3950



Document No.: CP-DWG-00433
Specification No.: PS3950

General Tolerance		Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
	0~3	± 0.13	1	H8	To update the content	Yang Pei	2019.01.23	
	3~18	± 0.16						
	18~50	± 0.31						
	≥ 50	± 0.55						



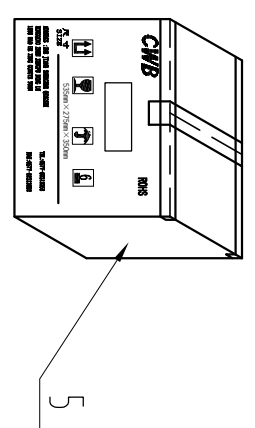
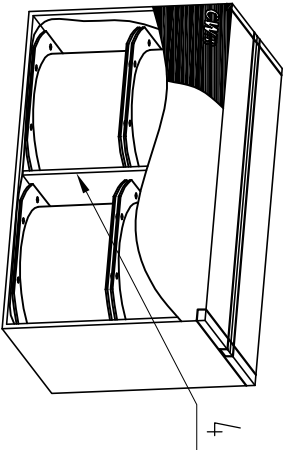
Contact View
1:2

Notes:

- 1.Material: Brass, Thickness=0.5mm;
- 2.Surface Finish: Tin over nickel plated;
- 3.Applicable Wires: AWG18~AWG14;
- 4.Compliant To The Current RoHS.

CUSTOMER DRAWING				Title: 5.3x0.5 ring tongue terminal	
Drawn	Lian 2017.01.17	Unit	mm	Scale	4:1
Checked	Guoying Wang 2017.01.17	Sheet No.	1 OF 1	Size	A4
Approved	Dongxulin 2017.01.17	Edition	B	Part No.:	TR15.3x0.5A2
				Document No.:	CP-DWG-00434
				Specification No.:	PS3950

Dimension	Tolerance	Rev. No	Location	Description	Reviser	Date
0-3	+0.13	1	H8	To update the content	Yang Pei	2019.01.23
3-18	+0.16					
18-50	+0.31					
≥50	+0.55					



5	Packing box		
4	Protective barrier		
3	Certificate		
2	Packing reel	TR15.3A0.5A2	5000 20000
1	TR15.3 series ring tongue terminal	TR15.3A0.5A1	5000 20000

CUSTOMER DRAWING

Drawn	LiQin	2017.01.17	Unit	Scale	Size	Edition	Part No.: TR15.3 series
Checked	Guoying Wang	2017.01.17	mm	/	A4	B	
Approved	Dongxuliu	2017.01.17	Sheet No.	1 Of 1			Document No.: BZ-DWG-00250
							Specification No.: PS3950



1 2 3 4 5 6 7 8 9 10

A B C D E F G H