

Product Specifications

产 品 承 认 书

客 户 Customer: _____
部品编号 Part Number: UJU/CF1002
产品名称 Description: _____
客户料号 Code NO: _____

样品提供 (SAMPLE PROVIDE)		
工程 Engineering	业务 Sales	核准 Approval
张 名	潘云丹	张 名

客户承认 (CUSTOMER APPROVAL)		
工程 Engineering	品管 Q. C	核准 Approval

IS09001:2008 IS014001:2004

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产 品 承 认 书 目 录

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1、Scope

适用范围

The contents of specifications for CF1002 series of related references, including performance, test methods and inspection of product requirements

本规格书内容适用于 CF1002 系列相关参考，包含了产品的性能、试验方法和检验要求

2、Applicable Standards

适用的标准

- | | | |
|-----|----------|---|
| 2.1 | GB/T2421 | Testing method for Environmental of Electrical Connectors Class 1 :
General Principles |
| | GB/T2421 | 电工电子产品环境试验 第一部分 总则 |
| 2.2 | GB/T2423 | Testing method for Environmental of Electrical Connectors |
| | GB/T2423 | 电工电子产品基本环境试验方法 |
| 2.3 | GB/T2424 | Testing method for Environmental of Electrical Connectors |
| | GB/T2424 | 电工电子产品环境试验导则 |
| 2.4 | GB/T5095 | The basic measuring method of electronic element |
| | GB/T5095 | 电子元件基本测量方法 |

3、Appearance and Dimension

外观及尺寸

- 3.1 **Appearance:Product surface without defect、 dirt、 crack、 and mechanical damang, Contact without rust,plating not oxided and not peeled.**
产品表面不应有对制品有害的缺陷、污垢、裂痕及机械损伤；接触件无锈蚀、镀层氧化、脱落等现象.
- 3.2 **Dimension:According to drawings**
外形尺寸：依照附图

4、Characteristic

产品特性

Item (项目)		Standard 标准规范	
4.1	Current Rated 额定电流	1A AC DC	
4.2	Voltage Rated 额定电压	150V AC DC	
4.3	Ambient Temperature Rang 使用温度范围	-25℃~+85℃	
4.4	Storage of Package 包装未拆封之保存	Temperature and humidity Condition 温湿度条件	Temperature: -10℃~+40℃ 温度: -10℃~+40℃ Percentag humidity: 70% Max 相对湿度: 70% Max
		Term 保存期限	1 Years 1 年
4.5	Floor Life 拆封后使用期限	Wafer 针座	Refer to 10 参照第 10 项

5、Material and Surface Treatment

材料以及表面处理

Part Name 部件型号	Type 类 型	Material 材 料	surface 表面处理	Expiain 说 明
Housing 孔座	Plastic 塑 壳	Nylon66 UL94V-0	Color: Black 颜色: 黑色	
Wafer 针 座	Plastic 塑 壳	LCP UL94V-0	Color: Beige 颜色: 米色	RoHS
	Contact 插 针	Phosphor bronze 锡青磷铜 厚 0.20mm	Tin Plating:3~5 μ m 镀锡: 3~5 μ m	
	Solder foot 焊 脚	Phosphor bronze 锡青磷铜 厚 0.30mm	Tin Plating:3~5 μ m 镀锡: 3~5 μ m	
Wafer 卧贴针座	Plastic 塑 壳	LCP UL94V-0	Color: Beige 颜色: 米色	
	Contact 插 针	Phosphor bronze 锡青磷铜 厚 0.20mm	Tin Plating:3~5 μ m 镀锡: 3~5 μ m	
	Solder tab 焊护耳	Phosphor bronze 锡青磷铜 厚 0.20mm	Tin Plating:3~5 μ m 镀锡: 3~5 μ m	

6、Electrical Performance

电气性能

N0. 序号	Ltem 项 目	Test Condition 测试条件	Requirement 技术要求
6.1	ContactResistance 接触电阻	A maximum voltage of 20mV and a maximum current of 100mA are applied to the Mate connector 组合状态下的连接器，两端施以最大测试电压 20 mV 以及最大测试电流 100 mA Does not include wire resistance 不包含电线阻抗	Initial value Less than 20m Ω 初始值 ≤ 30 m Ω After environmental testing Less than 40m Ω 环境试验后 ≤ 40 m Ω
6.2	withstandvoltage 耐电压	Apply 500V AC(rms)for 1 minute and the leakage current shall not exceed 0.5mA to the adjacent terminal and ground of the Mate connectors 组合状态下的连接器，相邻两导体末端各施以电压 500V AC(有效值)时间 1 分钟, 且漏电流必须小于 0.5mA(毫安培)	No breakdownor flashover 无击穿或者产生火花
6.3	InsulationResistance 绝缘电阻	Apply 500V DC(rms)for 1 minute between adjacent contacts to measure the insulation resistance 相邻两接触导体，1 分钟时间内施予 500V DC 电压，测量期间的绝缘阻抗值	More than 100 M Ω ≥ 100 M Ω

7、Mechanical Performance

机械性能

N0. 序号	Ltem 项 目	Test Condition 测试条件	Requirement 技术要求
7.1	Insertion force 插入力	The Housing together with the terminal ends with Wafer matched, at a rate per minute to 25 ± 3 mm, inserting force test 孔座连同端子与针座两端互配, 以每分钟 25 ± 3 mm 的速率，轴向作插入力测试	Less than 30N ≤ 30 N
7.2	withdrawal force 拔出力	The Housing together with the terminal ends with Wafer matched, at a rate per minute to 25 ± 3 mm, as the pull-out test 孔座连同端子与针座两端互配, 以每分钟 25 ± 3 mm 的速率，轴向作拔出力测试	More than 5N ≥ 5 N

N0. 序号	Ltem 项 目	Test Condition 测试条件	Requirement 技术要求
7.3	Pin Retention force PIN 针固定力	Exerts a force on the pin end, at a rate per minute $25 \pm 3\text{mm}$, axial force until the needle exit seat 在针脚前端施加力，以每分钟 $25 \pm 3\text{mm}$ 的速率，轴向直到针退出针座的力	Per contact 单一接触点 More than 2N $\geq 2\text{N}$

8、Endurance Characteristics

环境性能

N0. 序号	Ltem 项 目	Test Condition 测试条件	Requirement 技术要求
8.1	Durability 耐久性 (插拔寿命)	Mate connectors up 50 cycles at a Maximun rate of 10cycles per minute prior toenvironmental test 组合状态下的连接器且未经环境测试，每分钟内进行 10 次嵌入与拔出，连续 50 次嵌入与拔出往返测试	Contact Resistance $\leq 40\text{ m}\Omega$ 接触电阻 $\leq 40\text{ m}\Omega$
8.2	Temperature 温 升	Mate connector measure the temperature rise of contact when the maximum rated current is passed 组合状态下的连接器，通过最大容许电流测量导体温度上升值	30°C Max
8.3	Humidity 恒定潮湿	Connector combination under the condition of constant temperature and humidity place space, in accordance with the requirements of the following specifications, constant temperature and humidity test, after the experiment measuring contact resistance, insulation resistance and withstand voltage test 组合状态下的连接器放置恒定温度的湿气空间，依照如下规格要求，进行恒温恒湿试验，试验过后测量接触电阻、绝缘电阻以及耐电压测试 Temperature: $40 \pm 2^\circ\text{C}$ Relative humidity: 90-95%RH Period: 96 hours continuously 温度: $40 \pm 2^\circ\text{C}$ 相对湿度: 90-95% 周期: 持续 96 小时	Appearance: No damage 外观: 无损伤 Contact Resistance: $\leq 40\text{m}\Omega$ 接触电阻: $\leq 40\text{ m}\Omega$ Insulation Resistance: $\geq 50\text{M}\Omega$ 绝缘电阻: $\geq 50\text{M}\Omega$ Withstandvoltage: 耐电压: No breakdown or flashover 无击穿或者产生火花

NO. 序号	Ltem 项 目	Test Condition 测试条件	Requirement 技术要求
8.4	Vibration 耐振动	Connector combination state of the welding circuit board as test samples, the request in accordance with the following specifications, resistance to vibration test, whether to produce discontinuous current determined during the experiment (off) phenomenon, after the experiment measuring contact resistance 组合状态下的连接器焊接电路板上作为试验样品, 依照如下规格要求, 进行耐振动试验, 试验过程中确定是否产生不连续电流(断电)现象, 试验过后测量接触电阻值 Frequency(频率): 10-55-10 Hz/minute Amplitude(振幅): 1.5mm p-p Direction(方向): 1、Axis of up and down 上下轴向(Y 轴) 2、Axis of right the left 左右轴向(X 轴) 3、Axis of front and back 前后轴向(Z 轴) Period(周期): 2 hous for each direction 每一个轴向持续 2 小时	Appearance: No damage 外观: 无损伤 Contact Resistance $\leq 40 \text{ m}\Omega$ 接触电阻$\leq 40 \text{ m}\Omega$ current Discontinuity: 1 micro second Max 电流中断: 1 μ sec Max
8.5	Temperature cycling 温度循环	The combined state of connectors as test samples, in accordance with the requirements of the following specifications, thermal shock test, after the test measuring contact resistance, insulation resistance, and resistance to voltage 组合状态下的连接器作为试验样品, 依照如下规格要求, 进行冷热冲击试验, 试验后测量接触电阻、绝缘电阻、以及耐电压测试 One cycle consists of: -55$\pm$3$^{\circ}\text{C}$,30min,Room temp.10-15 min 85$\pm$3$^{\circ}\text{C}$,30min,Room temp.10-15 min Total cycle: 5 cycle -55$\pm$3$^{\circ}\text{C}$,30 分钟, 放置转换时间 10-15 分钟 85$\pm$3$^{\circ}\text{C}$,30 分钟, 放置转换时间 10-15 分钟 循环次数: 5 次	Same as paragraph 8.3 同 9.3 章节

N0. 序号	Ltem 项 目	Test Condition 测试条件	Requirement 技术要求
8.6	Thermal Aging 高温老化试验	Connector combination condition is placed in the oven, the request in accordance with the following specifications, high temperature aging test, after the test and measurement of contact resistance 组合状态下的连接器放置于加热烤箱中，依照如下规格要求，进行高温老化试验，试验后并测量接触电阻值 Temperature: $85\pm 2\text{ }^{\circ}\text{C}$ Period: 96 hours continuously 温度: $85\pm 2\text{ }^{\circ}\text{C}$ 周期: 持续 96 小时	Appearance: No damage 外观: 无损伤 Contact Resistance $\leq 40\text{ m}\Omega$ 接触电阻 $\leq 40\text{ m}\Omega$
8.7	Salt spray 盐雾	The combined state of connector as test samples, salt spray test according to the following specifications, test samples will be clean again with the water to dry naturally, measurement of contact resistance 组合状态下的连接器作为试验样品，依照如下规格要求进行盐水喷雾试验，试验后将样品用清水冲干净自然凉干，测量接触电阻值 Temperature: $35\pm 3^{\circ}\text{C}$ Solution: $5\pm 1\%$ Period: 24h 温度: $35\pm 3^{\circ}\text{C}$ 浓度: $5\pm 1\%$ 周期: 24h	Appearance: No damage 外观: 无损伤 Contact Resistance: $\leq 40\text{ m}\Omega$ 接触电阻: $\leq 40\text{ m}\Omega$
8.8	Solder ability 可焊性	The connector PIN pin, into the solder furnace, are solderability test in accordance with the following requirements 将连接器 PIN 针，放入焊锡炉中，依照如下规格要求进行焊锡性试验 Solder Temperature: $245\pm 5^{\circ}\text{C}$ Immersion period: $3\pm 0.5\text{S}$ 焊锡温度: $245\pm 5^{\circ}\text{C}$ 沉浸周期: $3\pm 0.5\text{S}$ Method: 0.5mm from contact tip and solder tab tip	Area of Soldering: $\geq 90\%$ 焊锡面积: $\geq 90\%$

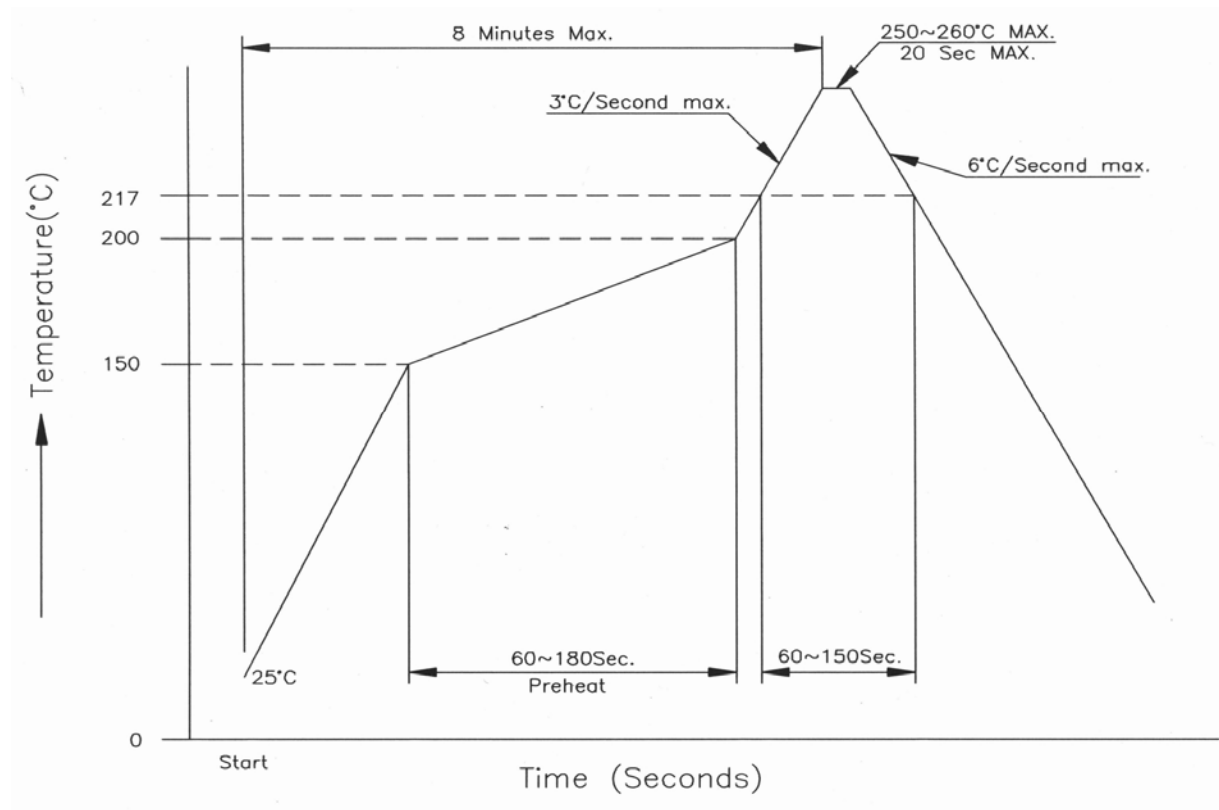
N0. 序号	Ltem 项 目	Test Condition 测试条件	Requirement 技术要求
8.9	Resistance to soldering heat 耐焊接热	anual soldering tin process Soldering time: $3 \pm 0.5S$ Soldering pot: $350 \pm 5^{\circ}C$ 手工烙铁焊锡工艺 焊接时间: $3 \pm 0.5S$ 焊接温度: $350 \pm 5^{\circ}C$ Mode of operation: 操作方式: Position DIP type needle solder, conductor or a fixed piece at the end of the 1.5mm distance DIP 型针座焊锡位置, 距离导体或固定片末端 1.5mm Position SMT type needle solder, conductor or a fixed piece at the end of the 0.5mm distance SMT 型针座焊锡位置, 距离导体或固定片末端 0.5mm Wave soldering tin soldering process Soldering time: $5 \pm 0.5S$ Soldering pot: $250 \pm 5^{\circ}C$ 波峰焊焊锡工艺 焊接时间: $5 \pm 0.5S$ 焊接温度: $250 \pm 5^{\circ}C$ Reflow soldering process Soldering time: 20 S Max Soldering pot: $255 \pm 5^{\circ}C$ 回流焊焊锡工艺 焊接时间: 20S 最大 焊接温度: $255 \pm 5^{\circ}C$ Please refer to the 9.1 solder reflow temperature curve 回流焊请参考 9.1 温度曲线图	Appearance: no deformation or damage 外观: 无变形或损坏

9、The reflow temperature curve

回流焊温度曲线

9.1 SMT lead-free process temperature curve

SMT 无铅工艺温度曲线



10、Caution

注意事项

- 10.1 plastic because of characteristics with water after package is opened should avoid exposure to, the temperature is higher than 30 °C, humidity is higher than 60%RH in the environment, and in the 24 hours after all after use, to prevent subsequent reflow, wave soldering process to produce foaming phenomenon of deformation

塑料因具有吸水之特性包装拆封后应避免暴露于，温度高于 30℃，湿度高于 60%RH 的环境中，并在拆封后 24 小时内全数使用完毕，防止后续回流焊、波峰焊制程产生起泡变形现象

11、Packaging 、Transportation

包装、运输

11.1 Packaging

包装

- (1) **The inner packaging for blister packaging, loading (paste) into the certificate, indicate the product name, specifications, quantity production date and other information**

针座内包装为管装、盘装，装（贴）入合格证，注明产品名称、规格型号、数量生产日期等信息

- (2) **Exterior package is carton, facing the packing list, the packing list marked with product name, specification model, quantity, date of dispatch.**

外包装为纸箱，贴装箱单、装箱单上注明产品名称、规格型号、数量、出货日期

- (3) **The product in the box must not rock**

产品在箱内不晃动

11.2 Transportation

运输

Any vehicle can be adopted for the transportation, but moisture-proof and no mechanical damage, transport temperature to $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$

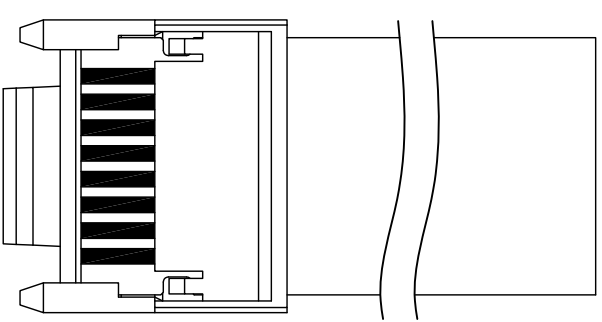
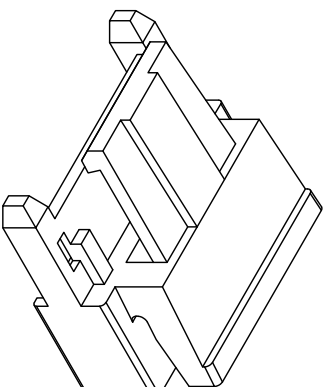
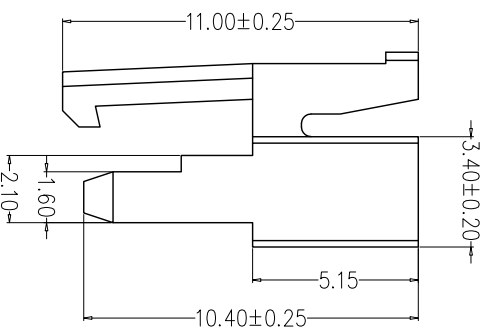
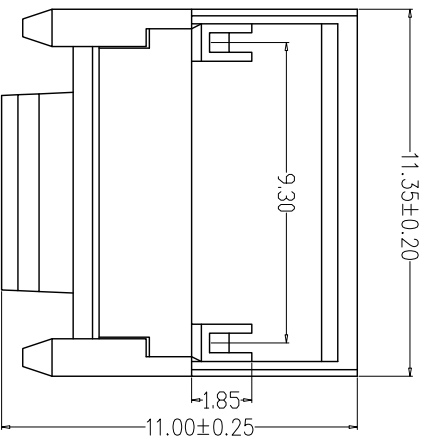
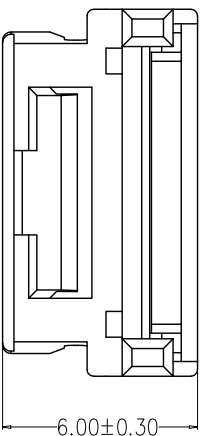
允许用任何方式运输，但需避免雨雪直淋和阳光照射，不能有碰撞和挤压等机械损伤，运输环境温度为 $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$

12、Remarks

备注

Any change or revision for the product specification will not be announced in advance. Please contact our sales representative for the latest information

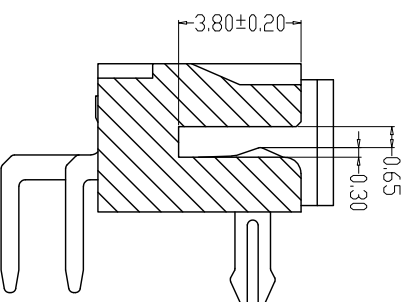
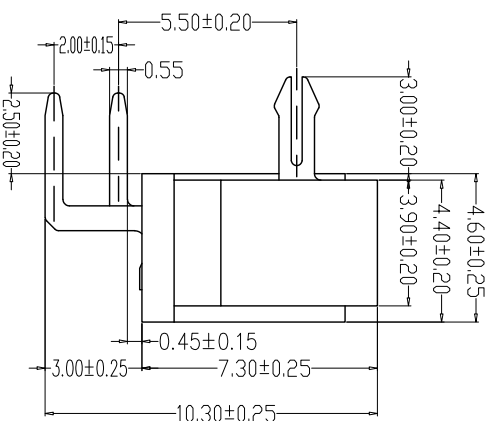
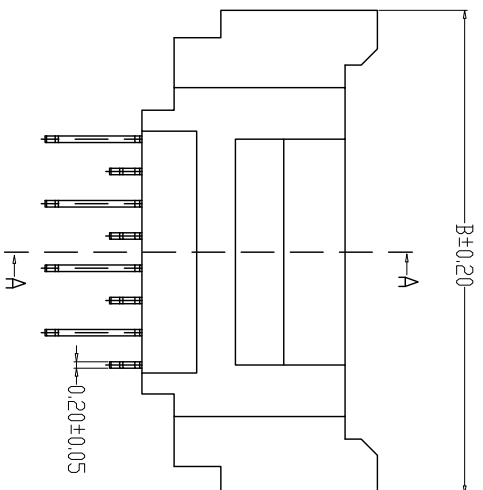
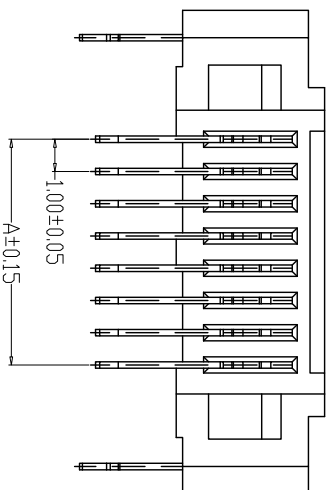
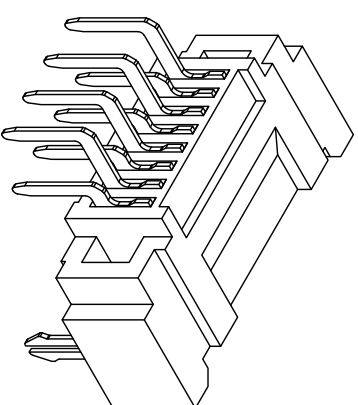
有关本规格书内容经变更或改版，如未能够及时发布与通知，烦请联络我司业务人员以提供产品最新资讯



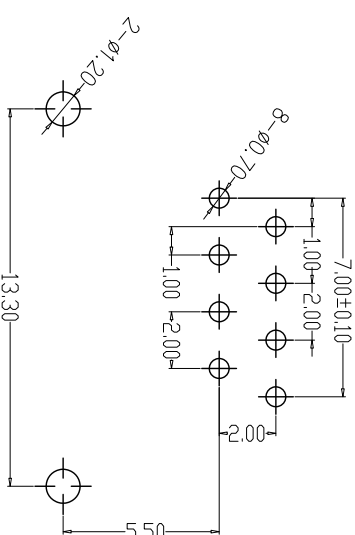
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			X.±0.25	X.±2'								
			X.±0.20	X.±1'								
			.XX±0.15	.XX±0.5'	核 准 APPROVAL	2014、10、10	乐清市宏一电子有限公司 YUEQING HONGYI ELECTRONICS CO., LTD					
			.XXX±0.10	.XXX±0.5'	单 位 UNITS	MM					比例 SCALE	1:1

SPECIFICATIONS

- 1、Current Rating: 1A AC, DC
 - 2、Voltage Rating: 150V AC, DC
 - 3、Temperature Range: $-25^{\circ}\text{C}\sim+85^{\circ}\text{C}$
 - 4、Contact Resistance: $30\text{m}\Omega$ Max
 - 5、Insulation Resistance: $500\text{M}\Omega$ Min
 - 6、Withstanding Voltage: $500\text{V AC}/\text{minute}$
 - 7、Material: Wafer LCP, Black UL94V-0
- PIN Phosphoric bronze Tin-plated
Solder tad Phosphoric bronze Tin-pla



SEC-A-A

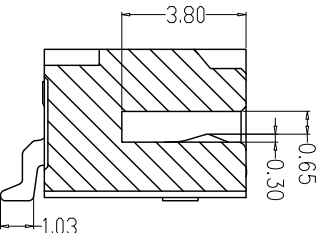
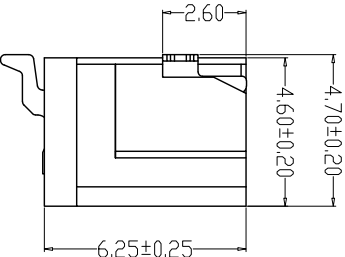
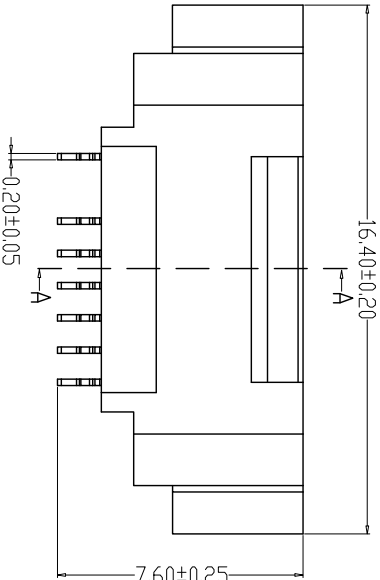
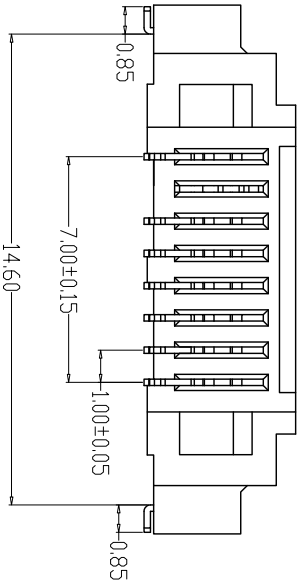
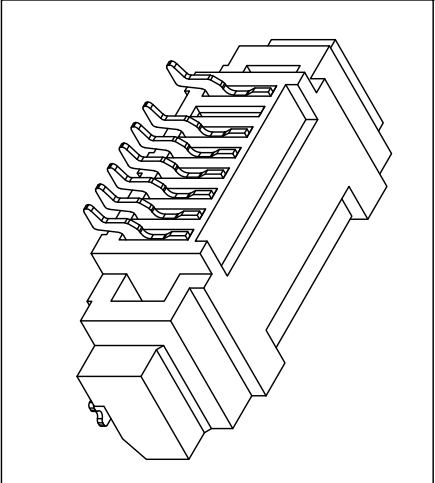


PCB LAYOUT

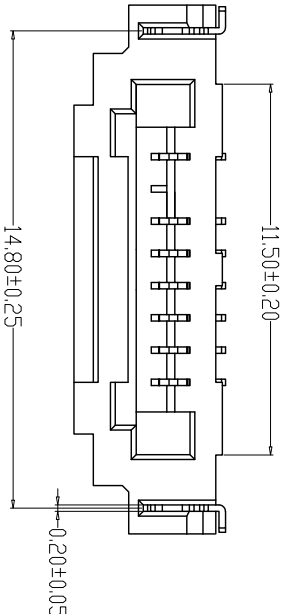
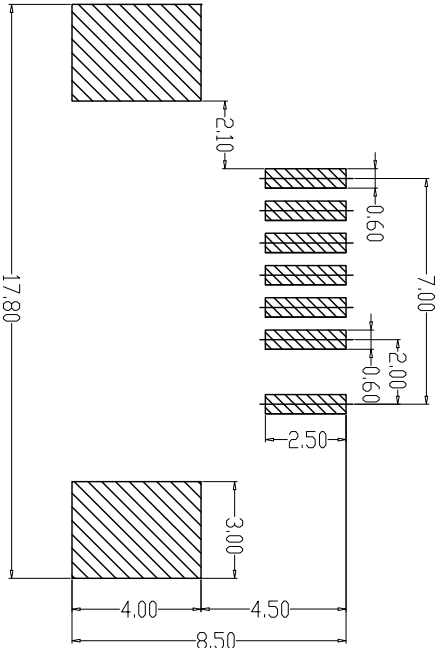
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X.±0.25	X.±2°	DRAWING	2014、08、15		PART NO.		REV.	
X.±0.20	X.±1°	审 核	张 名		品 名	UJU/CF1002 (2槽)	SHEET	1/1
X.±0.15	X.±0.5°	核 准	张 名		客户料号			
X.±0.10	X.±0.5°	APPROVAL	2014、08、18		CUTL. NO.			
乐清市宏一电子有限公司								
YUEQING HONGYI ELECTRONICS CO., LTD								

SPECIFICATIONS

- 1、Current Rating: 1A AC, DC
2、Voltage Rating: 150V AC, DC
3、Temperature Range: -25℃~+85℃
4、Contact Resistance: 30mΩ Max
5、Insulation Resistance: 500MΩ Min
6、Withstanding Voltage: 500V AC/minute
7、Material: Wafer LCP, Black UL94V-0
PIN Phosphoric bronze Tin-plated
Solder tad Phosphoric bronze Tin-plated



SEC.A-A



PCB LAYOUT

制图 DRAWN	变更内容 DESCRIPTION	日期 DATE	GENERAL TOLERANCE		制 图 DRAWING	钱岳生		料号 PART NO.	UJU/CF1002-8A71WB		版本 REV.	A
			X.±0.25	X.±2°		2014、10、07	张 名		UJU/CF1002(2槽)	页次		
			.X±0.20	.X±1°	审 核	2014、10、08	张 名	品 名	WATER SMT TYPE	1/1		
			.XX±0.15	.XX±0.5°	核 准	2014、10、10	张 名	客户料号				
			.XXX±0.10	.XXX±0.5°	APPROVAL			CITL NO.				
					单 位 UNITS	MM	比 例 SCALE	1:1	乐清市宏一电子有限公司 YUEQING HONGYI ELECTRONICS CO., LTD			