

# 承认书

## SPECIFICATION FOR APPROVAL

Rev.A

FILE NO. AS-CT3-21M-02-EP

客户名称

CUSTOMER NAME.

客户料号

CUSTOMER PART NO.:

型 号

Model Type:

XLR CONNECTOR

制造者系列号

Maker Series No.:

CT3 SERIES

制造者料号

Maker Part No.:

CT3-21M-02-EP

日 期

DATE

2018.08.29

Approved by Customer:



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工程部



## Specifications

Model Type:	XLR CONNECTOR	Designed	Checked	Approved
Maker Series No.:	CT3 SERIES	Linda.Chen	Paul.Weï	Frank.Lei
Maker Part No.:	CT3-21M-02-EP			
Customer Ref.:				

### 1. APPLICATION

This specification covers the requirements for XLR CONNECTOR used for Radio and associated sound equipment.

### 2. RATED

Practical temperature range: -30° C to +80° C

Humidity range: 85% RH.MAX

Rated voltage: 50V AC

Rated current: 6A

### 3. CONSTRUCTION

#### 3.1.Outline And Dimension

Outline and dimension of the jack shown be as attached part drawing.

#### 3.2.Part And Material

The parts and materials shown be in material identification sheet and certification of material.

### 4. REQUIREMENTS

#### 4.1.Electrical

##### 4.1.1.Insulation resistance

Insulation resistance of between mutually insulated terminals or metallic parts shall be not less than 100 megohms before test or initial,using a 500 volts DC insulation resistance meter.

TABLE 1:

Condition	Value
Initial	100 megohms or more
After heat test	
After cold test	
After resistance to soldering heat test	
After life test	
After temperature cycling test	50 megohms or more
After humidity test	

##### 4.1.2.Contact resistance

Contact resistance of between terminals of the jack to be made a closed circuit

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shall be not exceed 30 milliohms before test or initial, and shall be not exceed 40 milliohms after life test, at a current of below 1 kHz by the voltage drop method or four terminals method.

TABLE 2:

Condition	Value
Initial	less than 30 milliohms
After heat test	
After cold test	
After resistance to soldering heat test	
After temperature cycling test	
After humidity test	
After life test	less than 40 milliohms

### 4.1.3. Withstand voltage

The Jack shall be withstood 1500V (AC 50/60Hz RMS) between mutually insulated pin contacts for one minute, without breakdown.

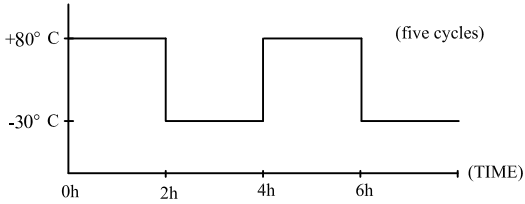
## 4.2. Mechanical

No.	Item	Test conditions	Requirement
4.2.1	Insertion and extraction force	Insertion and extraction force of product shall be measured with a load cell or equivalent. The matching plug shall be inserted into the product and extracted from the product slowly.	10N-50N
4.2.2	Terminal strength	Every terminal shall be capable of withstand a force of 30N for 10 seconds in any direction.	30N for 10 seconds without lossing and breakdown but deformation of terminal is accepted.
4.2.3	Loosen strength of contact	The product shall be capable of withstand a force of 30N, applied in direction of extraction of contact terminal for 10 seconds	30N for 10 seconds without lossing and breakdown
4.2.4	Life test	The life test shall consist of 5000 cycles of insertion and extraction with gauge plug covered with a thin coat of grease in order to prevent from heating and wearing, at a rate of 20 to 30 cycles per minutes under no load.	comply with paragraphs 4.1 and 4.2

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### 4.3. Environmental

No.	Item	Test conditions	Requirement
4.3.1	Heat test	The product shall be subjected to temperature of $80^{\circ}\text{C} \pm 2^{\circ}\text{C}$ for a period of 96 hours, then shall be allowed to remain in room ambient conditions for 30 minutes.	<ul style="list-style-type: none"> <li>●Comply with 4.1, 4.2</li> <li>●No appearance defect occurred</li> </ul>
4.3.2	Cold test	The product shall be subjected to temperature of $-30 \pm 2^{\circ}\text{C}$ for a period of 96 hours, then shall be allowed to remain in room ambient conditions for 30 minutes.	
4.3.3	Humidity test	The product shall be subjected to temperature of $40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and relative humidity of 90% to 95% for a period of 96 hours. Upon completion of the exposure, dew drops shall be blown out and removed from it, after which it shall be conditioned at room ambient conditions for 30 minutes.	
4.3.4	Change of temperature	<p>The product shall be subjected to conditions as shown in below, and then shall returned and allowed to remain ambient condition for 30 minutes.</p> 	
4.3.5	Solderability test	<p>Temperature of solder: <math>245 \pm 5^{\circ}\text{C}</math>.</p> <p>Time of dip: <math>3 \pm 0.5</math> seconds.</p> <p>Length of dip: 2.5 mm (from top of terminal).</p>	Wetting must occur over at least 95% of the solder immersion surface.

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### 4.4. Environmental

No.	Item	Test conditions	Requirement
4.3.6	Resistance to soldering heat test	1. Wave solder: Terminal for a printed circuit board(PCB), Temperature of solder: $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ Dip time: 3-5 seconds 2. Terminal for a lead wire: Temperature of solder: $380-420^{\circ}\text{C}$ Time: $\leq 4$ seconds	At the conclusion of the test, it shall be comply with paragraphs 4.1 and 4.2,and not show remarkable failure.
4.3.7	Salt mist test	1、 Testing bath: The temperature shall be $35^{\circ}\text{C} \pm 2^{\circ}\text{C}$ in the ambient of the specimen during the test. 2、 Spray apparatus: The apparatus shall be capable of producing fine dense mist uniformly. 3、 Salt water: The concentration of the salt water shall be adjusted at $5 \pm 1\%$ weight ratio at $35^{\circ}\text{C} \pm 2^{\circ}\text{C}$ . 4、 Testing time: $8 \pm 0.5$ hours. After washed in water. the sample shall be left alone for 1 to 2 hours in a room ambient.	Appearance shall be not extremely rust.and contacting portions should such that they will work without hindrance for practical use.

### 5. TEST CONDITION

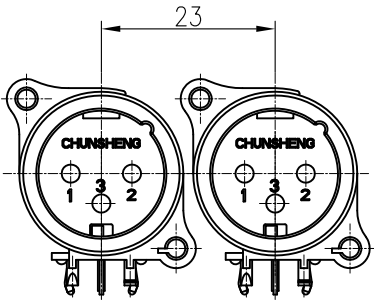
Unless otherwise specified herein, all measurements and tests shall be made at temperature of  $5^{\circ}\text{C}$  to  $35^{\circ}\text{C}$  and relative humidity of 45% to 85%.

### 6. AMENDMENT

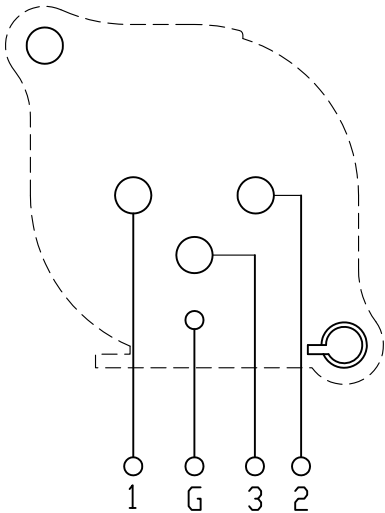
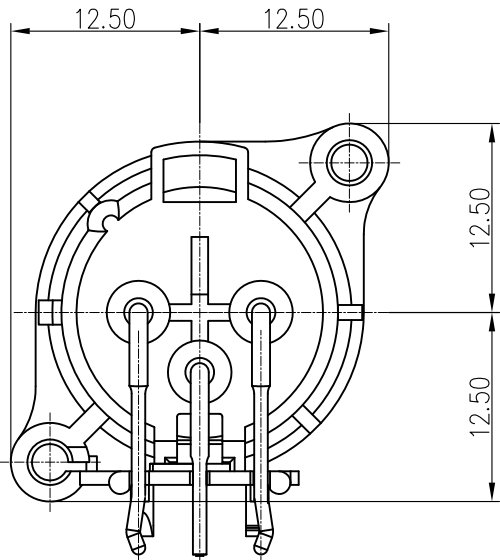
When the amendment of this specification comes into necessity,it shall be made by the mutual consultation and agreement between manufacture and customer.

REV.	ECN NO.	MODIFIED MARK	APPROVED
B	JC-1308024	Desing Modification	Frank.Wei

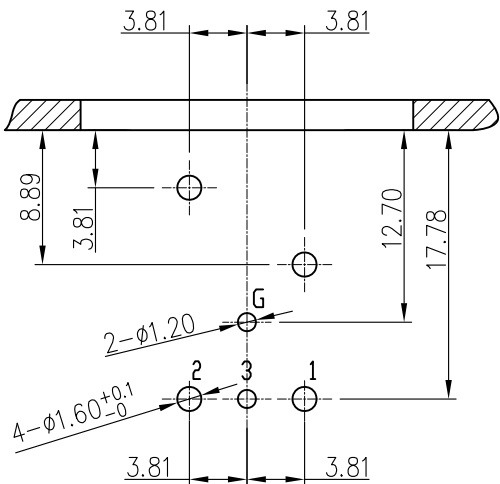
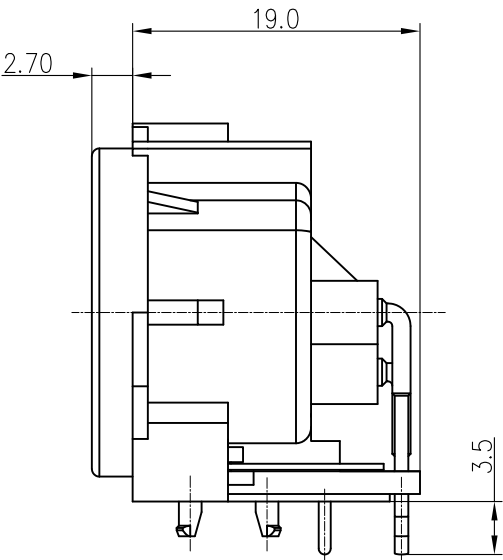
ELECTRICAL:  
电气性能  
RATED CURRENT: 6 A MAX.  
额定电流: 6 A MAX.  
RATED VOLTAGE: 50 V AC(RMS) /DC.  
额定电压: 50 V AC(RMS) /DC.  
CONTACT RESISTANCE: 30 MILLIOHMS MAX.  
接触电阻: 30 MILLIOHMS MAX.  
INSULATION RESISTANCE: 100 MEGAOHMS MIN.  
绝缘电阻: 100 MEGAOHMS MIN.  
DIELECTRIC WITHSTANDING VOLTAGE: 1500 VAC MIN.  
耐电压 : 1500 VAC MIN.  
MECHANICAL:  
机械性能  
INSERTION FORCE: 10-50 N MIN.  
插入力 : 10-50 N MIN.  
WITHDRAWAL FORCE: 10-50 N MIN.  
拔出力 : 10-50 N MIN.  
DURRABILITY: 5000 CYCLES MIN.  
耐久性 : 5000 CYCLES MIN.  
ENVIRONMENTAL:  
环境性能  
TEMPERATURE RANGE: -30° C TO 80° C.  
温度范围: -30° C TO 80° C.



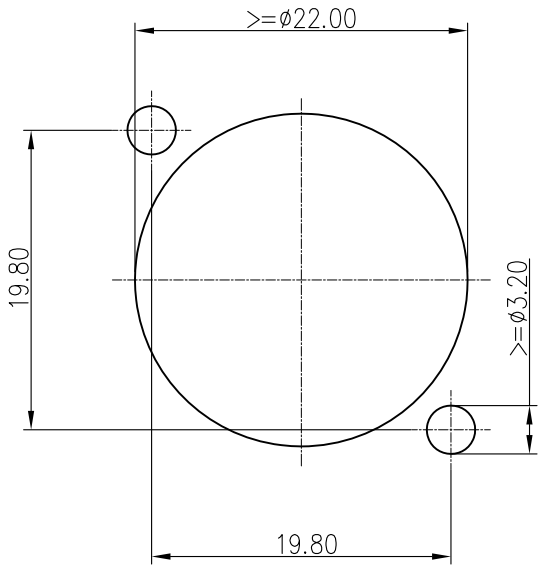
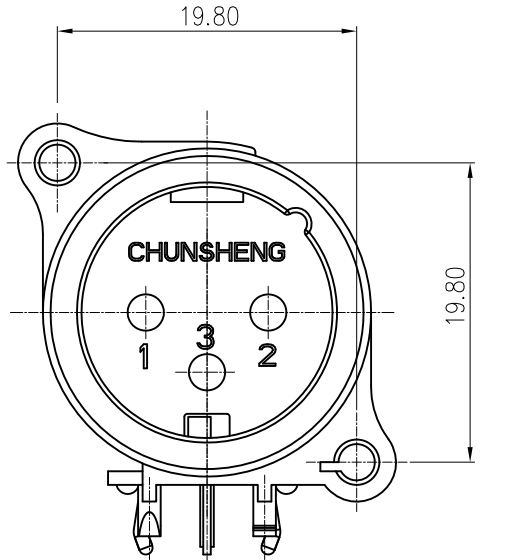
MIN ASSEMBLING DISTANCE  
SCALE 1:1



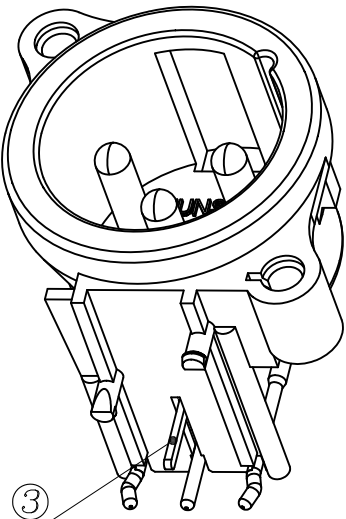
CIRCUIT DIAGRAM



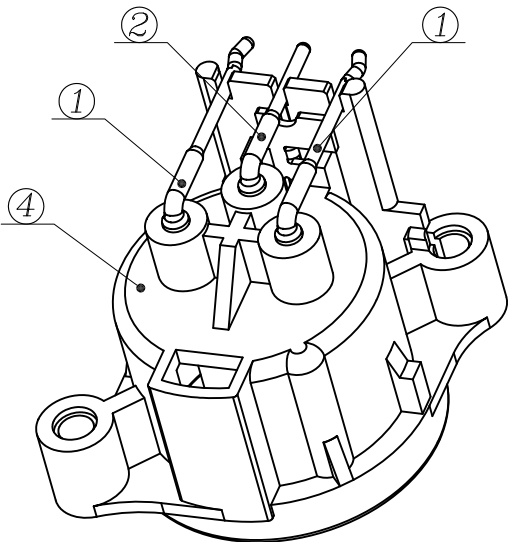
P.C.B. LAYOUT(TOLERANCE:±0.1)  
(TOP VIEW)



CHASSIS MOUNTING HOLES  
PANEL CUT OUT (front side)



3D VIEW



4	HOUSING	NYLON(PA66) G30 UL94HB	1	BLACK	RoHS COMPLIANT
3	EARTH TERMINAL	PHOSPHOR BRONZE T=0.50mm	1	Sn-PLATED	
2	SHORT NEEDLE	BRASS	1	Au-PLATED	
1	LONG NEEDLE	BRASS	2	Au-PLATED	
No.	P/N	Material	Q'TY	Finish/Color	Remarked
X.	±0.35	X.* ±5°	MODEL NAME: CT3-21M-02-EP (PART NO.) (701-0001-0076)		浙江春生电子有限公司 Zhejiang Chunsheng Electronics Co., Ltd.
.X	±0.25	.X.* ±3°			
.XX	±0.20	.XX.* ±1°	MAT'L: See Detail Sheet	DESIGN: <b>ARRON.ZHU</b>	TITLE: CT3-21M-02-EP(CUSTOMER DWG.)
.XXX	±0.15	TOL TABLE:	FINISH: See Detail Sheet	CHECKED: <b>PAUL.WEI</b>	DWG NO.: 701-1000-0076
THIS DOCUMENT IS THE PROPERTY OF CHUNSHENG ELECTRONICS CO.,LTD.,NO PART THEREOF MAY BE REPRODUCED AND USED WITHOUT THE PRIOR WRITTEN CONSENT OF THE OWNER			Q'TY /	APPROVED: <b>DAVID.LI</b>	UNIT: MM VIEW:
					SCALE: 2:1 SHEET: 1/1 SIZE: A3