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Zhejiang Chunsheng Electronics CO.,LTD.

浙江春生电子有限公司



Specifications

Model Type:	XLR CONNECTOR	Designed	Checked	Approved
Maker Series No.:	CT3 SERIES			
Maker Part No.:	CT3-03HMD-EP	Linda.Chen Yuhao.Zl		Paul.Wei
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: 250V AC Rated current: 6A Max.

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

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 20 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		
After heat test	less than 20 milliohms	
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 withstanded 1500V (AC 50/60Hz RMS) between mutually insulated pin contacts for one minute, without breakdown.

4.1.4.Capacitance between contacts: ≤7pf

4.2. Mechanical

No.	Item	Test conditions	Requirement
4.2.1	extraction	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, 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° C± 2° C for a period of 96 hours, then shall be allowed to remain in room ambient conditions for 30 minutes.	
4.3.2	Cold test	The product shall be subjected to temperature of $-30\pm2^{\circ}$ 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° C± 2° 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.	Comply with 4.1, 4.2 No appearance defect occurred
4.3.4	Change of temperature	The product shall be subjected to conditions as shown in below, and then shall returned and allowed to remain ambient condition for 30 minutes. (five cycles) 30 °C Oh Oh 2h 4h 6h (TIME)	
4.3.5	Solderability test	Temperature of solder: $245\pm5^{\circ}$ C. Time of dip: 3 ± 0.5 seconds. Length of dip: 2.5 mm (from top of terminal).	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	 Wave sloder: Terminal for a printed circuit board(PCB), Temperature of solder: 260° C± 5° C Dip time: 3-5 seconds Terminal for a lead wire: Temperature of solder: 380-420° C Time: ≤4seconds 	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	 Testing bath: The temperature shall be 35° C± 2° C in the ambient of the specimen during the test. Spray apparatus: The apparatus shall be capable of producing fine dense mist uniformly. Salt water: The concentration of the salt water shall be adjusted at 5± 1% weight ratio at 35° C± 2° C. Testing time: 8 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° C to 35° 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.

