

# 承认书

SPECIFICATION FOR APPROVAL

Rev.A

FILE NO. AS-PJ-3195HA-EP

客户名称

CUSTOMER NAME.

客户料号

CUSTOMER PART NO.:

型 号

Model Type:

Ø3.5 DIP TYPE PHONE JACK

制造者系列号

Maker Series No.:

PHONE JACK SERIES

制造者料号

Maker Part No.:

PJ-3195HA-EP

日 期

DATE

2018.9.11

Approved by Customer:



香港春生实业有限公司

浙江春生电子有限公司

中国浙江省乐清市虹桥镇东工业区幸福路1288-5号

No.1288-5,Xingqian East Road,East Industrial Zone,Hongqiao

Town,Yueqing City,Zhejiang,P.R.China

TEL:86-577-57578000

FAX:86-577-57575773

E-mail:saler@chunsheng.com





## Specifications

|                   |                          |          |           |          |
|-------------------|--------------------------|----------|-----------|----------|
| Model Type:       | Ø3.5 DIP TYPE PHONE JACK | Designed | Checked   | Approved |
| Maker Series No.: | PHONE JACK SERIES        | Kbing.Ni | Paul.Weii | David.Li |
| Maker Part No.:   | PJ-3195HA-EP             |          |           |          |
| Customer Ref.:    |                          |          |           |          |

### 1. APPLICATION

This specification covers the requirements for earphone jacks used for radios, radio cassettes, cassette tape recorders, TV'S, video cassette recorders, video disk units, etc.

### 2. RATED

2.1.Practical temperature range: -25°C to +70°C

Humidity range: 85% RH.Max.

2.2.Rated voltage: 30V DC

2.3.Rated current: 0.3A

### 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 the jack between mutually insulated terminals or metalic parts shall not less than 100 megohms before test or initial, using 100 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                     |                     |

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### 4.1.2.Contact resistance

Contact resistance of the jack between terminals to be made a closed circuit shall not exceed 50 milliohms before test or initial, and shall not exceed 100 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 60 milliohms |

### 4.1.3.Withstanding voltage

The Jack shall withstood 500V (AC 50/60Hz RMS) between mutually insulated pin contacts for one minute, without breakdown.

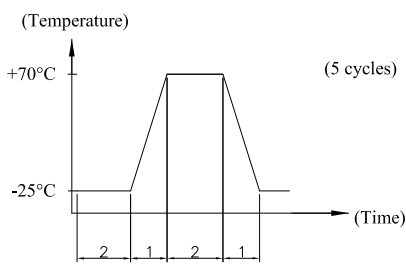
### 4.2. Mechanical

| No.   | Item                           | Test conditions                                                                                                                                                                                                                 | Requirement                                                                              |
|-------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| 4.2.1 | Insertion and extraction force | Insertion and extraction force of jack shall measured with a load cell or equivalent. The matching plug shall inserted into the jack and extracted from the jack slowly.                                                        | 3N~30N                                                                                   |
| 4.2.2 | Terminal strength              | Every terminal shall capable of withstand a force of 5N for 10 seconds in any direction.                                                                                                                                        | 5N for 10 seconds without lossing and breakdown but deformation of terminal is accepted. |
| 4.2.3 | Loosen strength of contact     | The jack shall capable of withstand a force of 5N, applied in direction of extraction of contact terminal for 10 seconds                                                                                                        | 5N 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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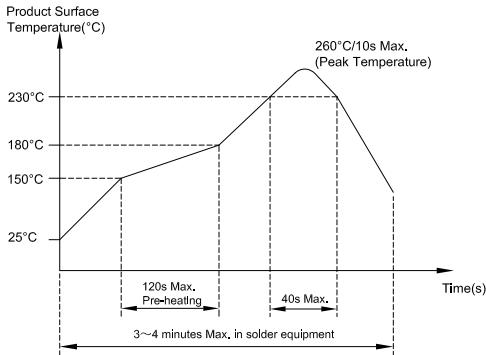
### 4.3. Environmental

| No.   | Item                  | Test conditions                                                                                                                                                                                                                                                                                                | Requirement                                                                                                     |
|-------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 4.3.1 | Heat test             | The jack shall subjected to temperature of $70^{\circ}\text{C}\pm 2^{\circ}\text{C}$ for a period of 96 hours, then shall 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 jack shall subjected to temperature of $-25^{\circ}\text{C}\pm 2^{\circ}\text{C}$ for a period of 96 hours, then shall allowed to remain in room ambient conditions for 30 minutes.                                                                                                                        |                                                                                                                 |
| 4.3.3 | Humidity test         | The jack shall 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 blown out and removed from it, after which it shall conditioned at room ambient conditions for 30 minutes. |                                                                                                                 |
| 4.3.4 | Change of temperature | <p>The product shall 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 90% 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 | <p>1. SMT Reflow solder:<br/>Temperature of solder: <math>260\pm5^{\circ}\text{C}</math><br/>Time: 10 seconds Max.</p>  <p>2. Soldering iron solder:<br/>Temperature of solder: <math>360\pm5^{\circ}\text{C}</math><br/>Time: 3~5 seconds</p>                                                                                                                                                                                                                                               | At the conclusion of the test, it shall comply with paragraphs 4.1 and 4.2, and not show remarkable failure.                      |
| 4.3.7 | Salt spray test                   | <p>1、Testing bath:<br/>The temperature shall <math>35^{\circ}\text{C}\pm2^{\circ}\text{C}</math> in the ambient of the specimen during the test.</p> <p>2、Spray apparatus:<br/>The apparatus shall capable of producing fine dense mist uniformly.</p> <p>3、Salt water:<br/>The concentration of the salt water shall adjusted at <math>5\pm1\%</math> weight ratio at <math>35^{\circ}\text{C}\pm2^{\circ}\text{C}</math>.</p> <p>4、Testing time: <math>24\pm0.5</math> hours.<br/>After washed in water. the sample shall left alone for 1 to 2 hours in a room ambient.</p> | Appearance shall 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 made at temperature of  $5^{\circ}\text{C}$  to  $35^{\circ}\text{C}$  and relative humidity of 45% to 85%.

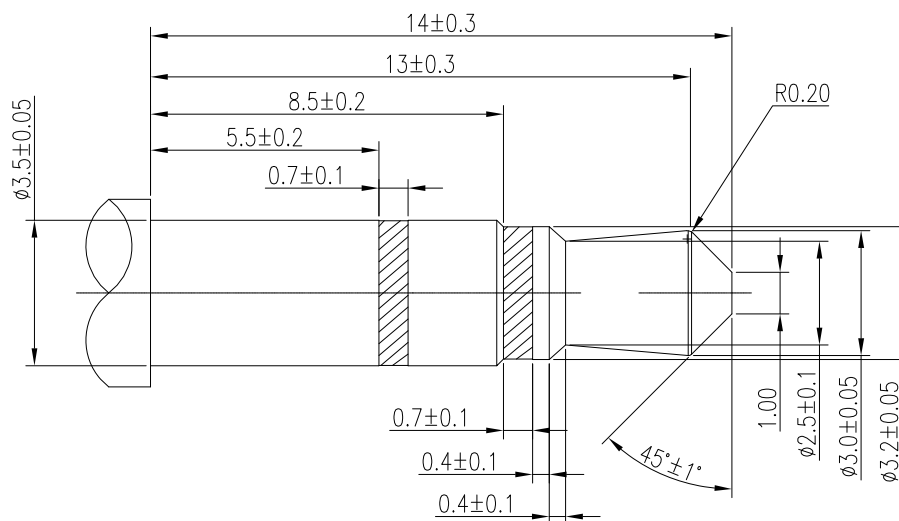
### 6. AMENDMENT

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

## Specifications

|                 |                          |
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| Maker Model No. | PHONE JACK SERIES        |
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### Ø3.50mm 3 POLE PLUG DETAIL DRAWING



Surface roughness: Peak-to valley height of 0.20  
micro Max.

For insertion and extraction force:

Material: T10A

Hardness: HRC56-62

For contact resistance:

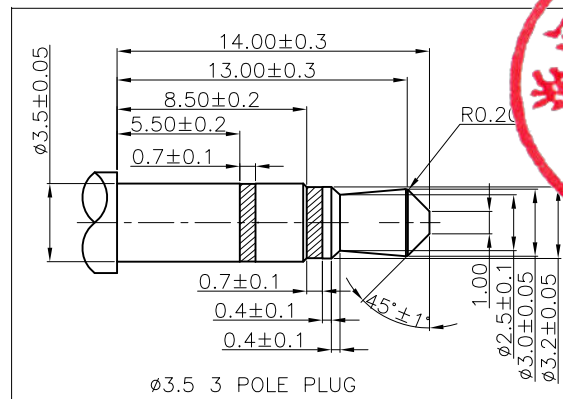
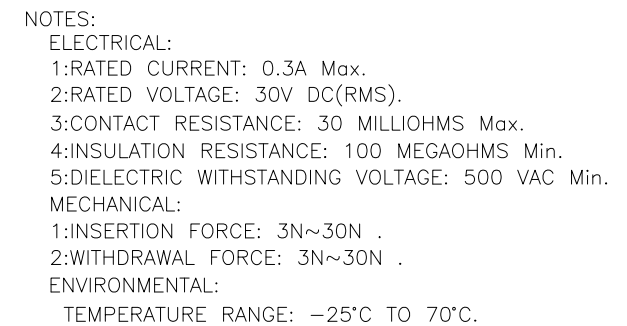
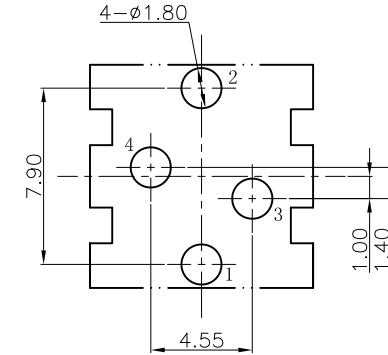
Material: Brass.

Finish: Silver plated.

Technical drawing of a mechanical part, likely a bearing housing, showing a cross-section with dimensions and callouts.

Dimensions and Callouts:

- Overall width:  $12.4 \pm 0.3$
- Distance from right face to centerline:  $4.90$
- Distance from left face to centerline:  $7.9 \pm 0.2$
- Distance from left face to first internal feature:  $4 \pm 0.2$
- Distance from first internal feature to centerline:  $3.7 \pm 0.2$
- Distance from centerline to second internal feature:  $3.4 \pm 0.3$
- Overall height:  $\varnothing 7.90$
- Callouts: ③, ④, ⑤, ⑥



|   |   |
|---|---|
| ① | T |
| ② | T |
| ③ | Y |
| ④ | Y |
| ⑤ | G |
| ⑥ | G |
| ⑦ | H |
| ⑧ | H |
| ⑨ | X |
| ⑩ | X |

NO. 13

X: +0 38

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