

PRODUCT SPECIFICATION

Part Number	PJ-242X-SMT	Rev	E	Date	10/12/18		
Product Description	2.5Earphone Socket, W12.0xD5.0,SMT, Horizonta				Page	1	
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SPECIFICATION

1. Standard atmospheric condition

Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows :

Ambient temperature: 15°C to 35°C

Relative humidity : 45% to 80%

Air pressure : 86kPa to 106kPa

If there is any doubt about the results, measurements shall be made within the following limits :

Ambient temperature: 20 ±1°C

Relative humidity : 60% to 70%

Air pressure : 86kPa to 106kPa

Operating temperature range: -25°C to 70°C

Storage temperature range : -25°C to 70°C

2. Electrical characteristics :

	Item	Condition	Specifications			
1	Rated Voltage Rated Current		DC 12V 1A			
2	Contact Resistance	Measurement shall be made at with small current 1000 Hz (1A MAX.)	between plug and terminals <ul style="list-style-type: none"> ● Pre test: 30 mΩ max. ● Post test: 50 mΩ max. between switch parts <ul style="list-style-type: none"> ● Pre test :80 mΩ max. ● Post test:100 mΩ max. 			
3	Insulation Resistance	A voltage of 500V DC shall be applied for 1 minute after which measurement shall be made.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Between the conductors which should not make contact under normal conditions.</td> <td rowspan="2" style="width: 50%; text-align: center; vertical-align: middle;">100MΩ MIN.</td> </tr> <tr> <td>Between each terminal and insulated metal part.</td> </tr> </table>	Between the conductors which should not make contact under normal conditions.	100MΩ MIN.	Between each terminal and insulated metal part.
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	Item	Condition	Specifications
4	Dielectric Strength	500V AC (50 Hz to 60 Hz) for 1 minute. Trip current : 2mA	Between the conductors which should not make contact under normal conditions. Between each terminal and insulated metal part.
			Without damage to parts, arcing or breakdown, etc.

3. Mechanical characteristics

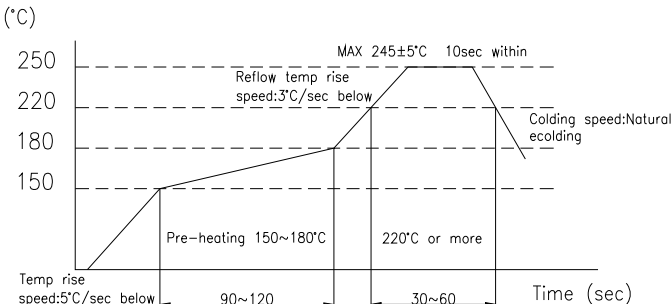
	Item	Condition	Specifications
1	Operating Force	Insertion and withdrawal force shall be measured after inserting and withdrawing 3 times by using a gauge of standard dimensions.	
		Insertion force	3N ~ 30N (0.3kgf ~ 3.0kgf)
		Withdrawal force	

4. Endurance characteristics

	Item	Condition	Specifications
1	Soldering Test	Temperature of solder : 245°C ±3°C Time of dip : 2~3 seconds Length of dip : 2 mm (from top of terminal) Solder : Sn/3.0Ag/0.5Cu Flux:25%Resin/75%IPA	The soldered area shall be covered a minimum of 95% of the surface being immersed.
2	Cold	The jack shall be stored for 96 hours at a temperature of -25±3°C immediately after which measurement shall be made.	Dimensional requirements shall be satisfied. Electrical and mechanical characteristics shall be satisfied.

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	Item	Condition	Specifications
3	Dry Heat	The jack shall be stored for 96 hours at a temperature of $70\pm 2^{\circ}\text{C}$ immediately after which measurement shall be made.	Dimensional requirements shall be satisfied. Electrical and mechanical characteristics shall be satisfied.
4	Humidity Test	Temperature : $40^{\circ}\text{C}\pm 2^{\circ}\text{C}$ Relative humidity : 90% ~95% for 96 hours after testing jack shall be left alone for 30 minutes in a room ambient.	Dimensional requirements shall be satisfied. Electrical and mechanical characteristics shall be satisfied.
		Insulation resistance	$50\text{M}\Omega$ MIN.
5	Operating Endurance	Jack shall withstand 5000 cycles inserting and withdrawing shall be made by the following mating plug or standard dimension gauge, at a speed of 10 to 30 times / min.	Dimensional requirements shall be satisfied. Electrical and mechanical characteristics shall be satisfied.
		Contact resistance	$.100\text{m}\Omega$ MAX.
6	Reflow Heat Resistance Test	<p>pre-heat: $150^{\circ}\text{C}\sim 180^{\circ}\text{C}$ (90~120 seconds) Peak temperature: $245^{\circ}\text{C}\pm 5^{\circ}\text{C}$ (10 sec within) 220°C above, 30~60sec within</p>  <p>The graph shows a temperature profile over time. The y-axis is temperature in degrees Celsius (150 to 250) and the x-axis is time in seconds. The profile includes a pre-heating phase from 150°C to 180°C (90-120s), a reflow phase with a peak of 245±5°C (10s within) and a 220°C or more dwell (30-60s), and a cooling phase with natural convection.</p>	Electrical characteristics shall be satisfied. No any damage after reflow.

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	Item	Condition	Specifications
7	Composite Temperature/ Humidity Cyclic Test	<p>The jack shall be subjected to the conditions as shown in below, and then shall be returned and allowed to remain in room ambient condition for 30 minutes.</p> <div style="text-align: center;"> <p style="text-align: center;">Time in hours (h) (4 cycles)</p> </div>	<p>Electrical and mechanical Characteristics shall be Satisfied.</p>

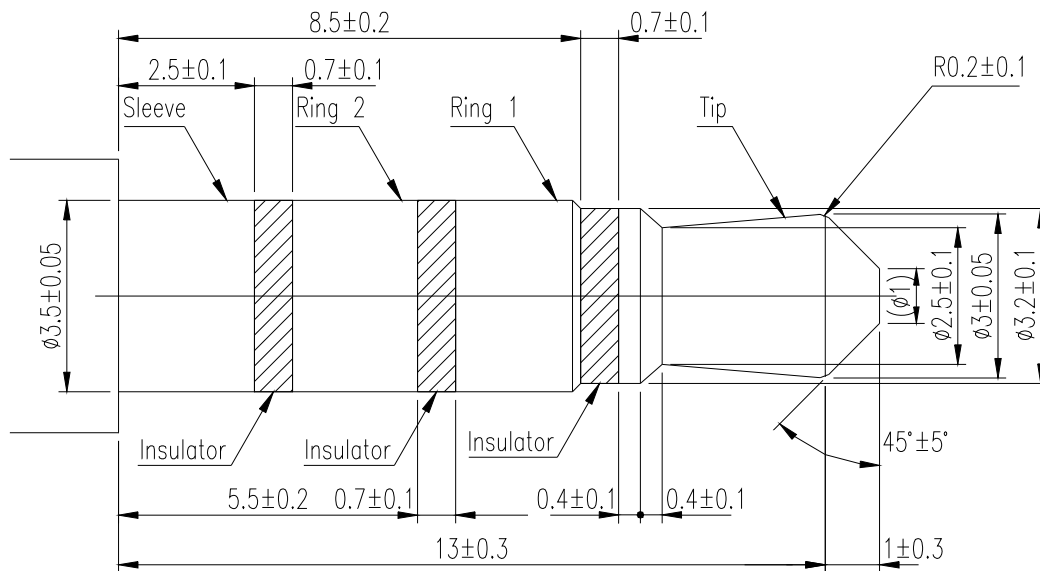
5. Amendment :

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

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6. Mating plug dimension



4 Conductors Type

