

# SPECIFICATION

## FOR APPROVAL

Customer : \_\_\_\_\_

Description :                     Piezo Audio Transducer                    

ICC/INTERVOX Model No.           BRP2416P-12-CFS          

Customer's Model No. : \_\_\_\_\_

ISSUE	CHECK	APPROVAL	CUSTOMER
ZhouMingMing 17.02.17	ShiCong 17.02.17	WangXueWen 17.02.17	

CHANGES				
NO.	Date	ECN.NO	Edition	Description
1	17.02.17	170217	A0	初稿
2	17.02.20	170220	A0-A1	增加封口纸



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## 1. ELECTRICAL AND ACOUSTICAL SPECIFICATION

	Item	Unit	Specifications
1-1	Rated Voltage	VDC	12
1-2	Operating Voltage	VDC	3-20
1-3	* Rated Current (Max)	mA	8
1-4	* Min Sound Output at 30 cm	dB	85
1-5	* Resonant Frequency	Hz	2900±500
1-6	Tone Nature		Single
1-7	Operating Temperature	°C	-20~+70
1-8	Storage Temperature	°C	-30~+80
1-9	Weight	g	6
1-10	Housing Material		ABS777 (Black)
1-11	Lead Pin Material		Red Copper (DSn)

\* Value Applying at Rated Voltage(DC)

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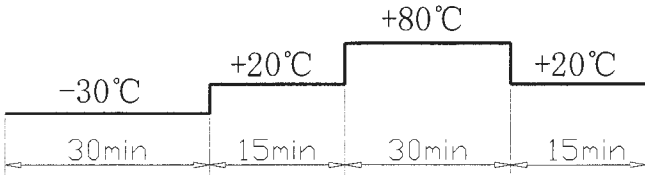
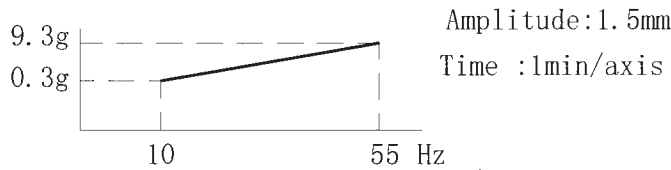
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## 2.ENVIRONMENTAL TEST

Item	Specifications
2-1 Storage in High temp.	Storage in $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
2-2 Storage in Low temp.	Storage in $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
2-3 Storage in Humidity	Storage in $+40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 90-95%RH test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
2-4 Thermal cycle test.	 <p>Make this test for 5 cycles without applying power, then expose to the room temperature for 2 hours.</p>
2-5 Vibration test	 <p>Make this test for the directions of X,Y, Z for 2 hours each (total 6 hours).</p>
2-6 Drop test	Free drop a unit from the height 100cm to the surface of 10mm thick board, three directions(X,Y,Z).
2-7 Solderability test	Soldering temp.: $260 \pm 5^{\circ}\text{C}$ Heat applying time: $3 \pm 0.5\text{sec}$ .

### PASS CRITERION :

After these tests, the change of S.P.L shall be within  $\pm 5 \text{ dB}$  .

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## 3.MEASURING METHOD(BUZZER MODE)

### 3-1 .Test Condition

#### 3-1-1.STANDARD

Temperature :  $25 \pm 3^{\circ}\text{C}$

Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

#### 3-1-2.JUDGEMENT

Temperature : 15 ~  $35^{\circ}\text{C}$

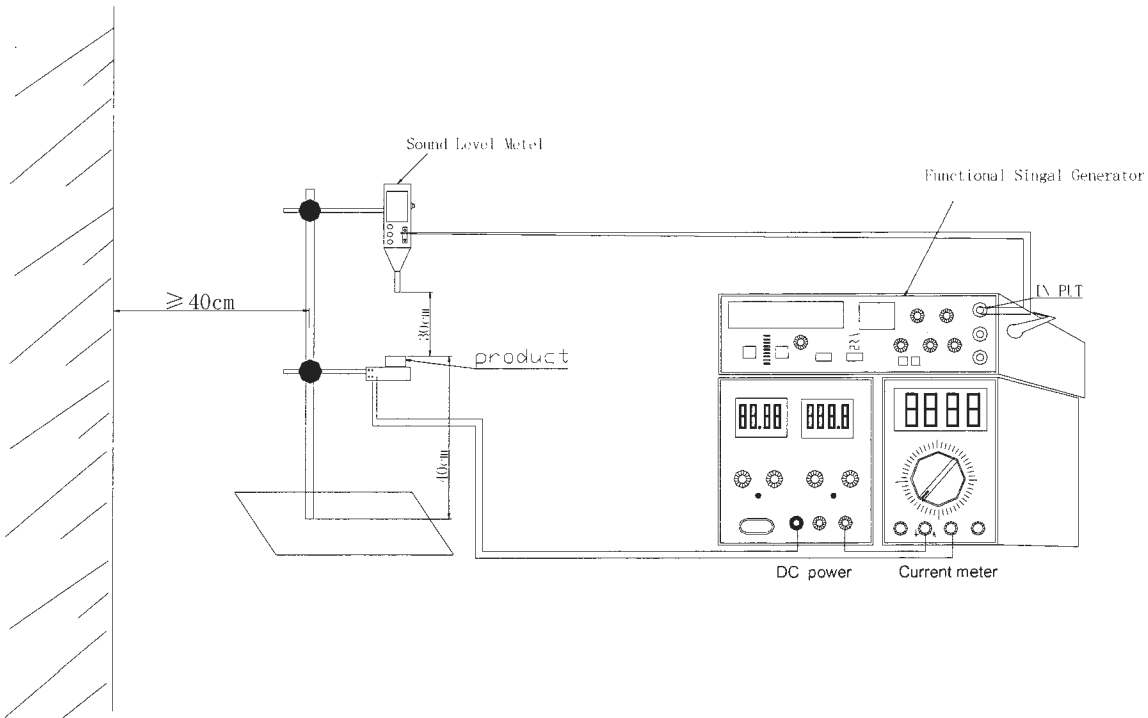
Relative humidity : 45% ~ 85%,

Atmospheric pressure: 860mbar to 1060mbar.

### 3-2. Standard Test Fixture

1.rated Voltage: 12VDC

2.Resonant Frequency:  $2900\text{Hz} \pm 500$



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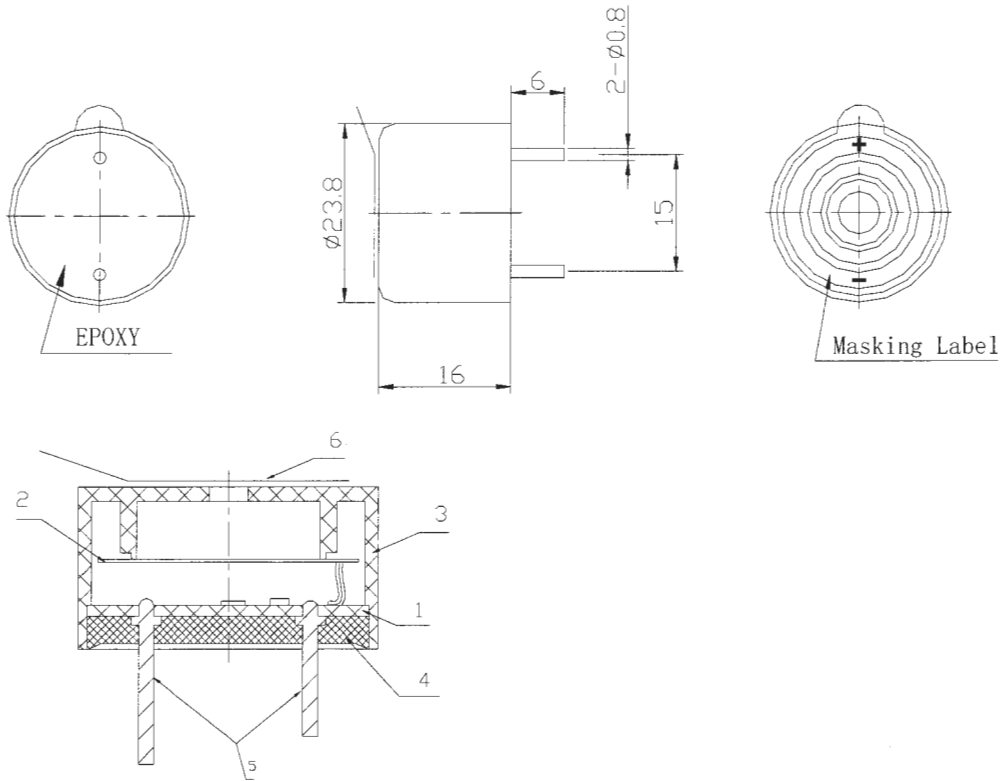
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## 5.DIMENSIONS

Unless otherwise specified, tolerance:  $\pm 0.5$ (unit:mm)



- 1) All parts must be meet to ROHS.
- 2) Wave solder and wash allowed.

6	Masking label	1	Paper	
5	Lead pin	2	Red Copper (DSn)	
4	Potting		Epoxy	
3	Housing	1	Black ABS777	
2	Piezo element	1	Brass	
1	PCB	1	Epoxy Board	
Part No.	Part Name	Q'TY	Material	Remark

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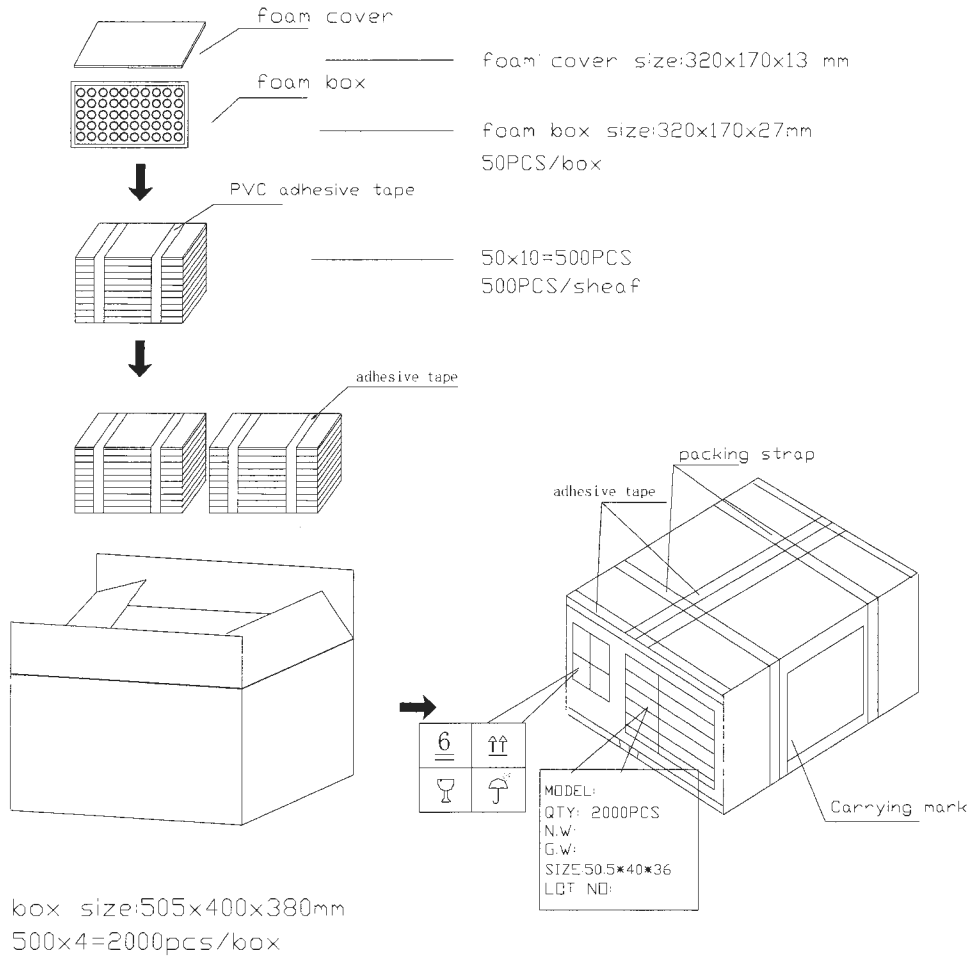
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## 6.PACKING



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