



## PRODUCT SPECIFICATION

Product Name: Piezo Buzzer

Part Number: MSPT12A40P6.5V12

Document No: \_\_\_\_\_

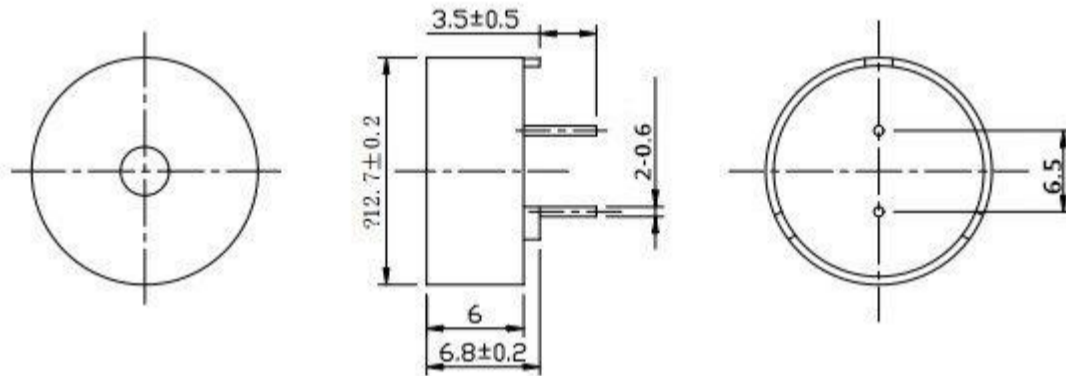
Date: 2021.5.27

| DRAWING BY | CHECKED BY | APPROVED BY |
|------------|------------|-------------|
| CHEN YUAN  | YUE QIN    | JIN LI      |

## 1.SPECIFICATION

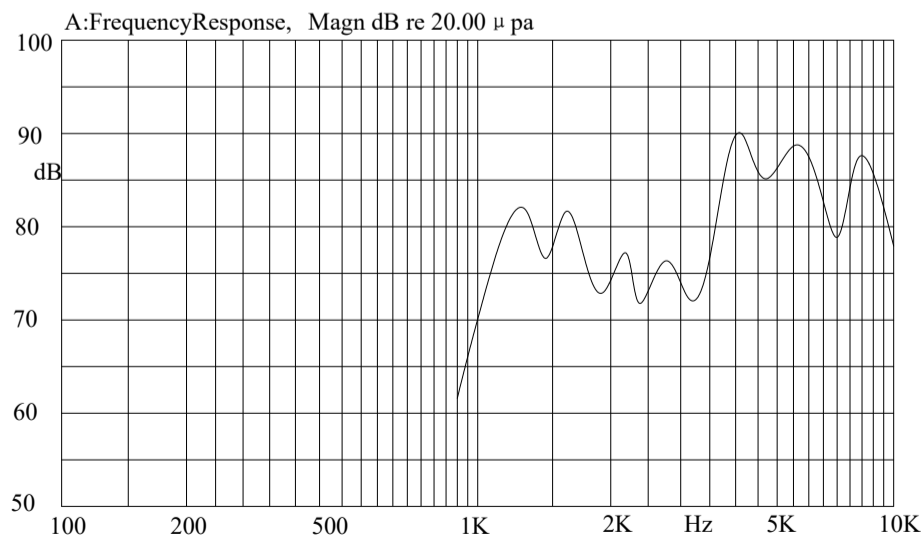
| Type                             | Unit | MSPT12A40P6.5V12 |
|----------------------------------|------|------------------|
| Rated Voltage                    | Vp-p | 12.0             |
| Operating Voltage                | Vp-p | 1.0~25.0         |
| *Rated Current (MAX)             | mA   | 2.0              |
| *Min.Sound Output at 4.0KHz/10cm | dB   | 80               |
| Capacitance at 1KHz              | pF   | 12000±30%        |
| *Resonant Frequency              | Hz   | 4000             |
| Operating Temperture             | °C   | -20~+70          |
| Storage Temperture               | °C   | -30~+80          |
| Housing Material                 |      | PPO              |
| Weight                           | g    | 0.9              |

## 2.APPEARANCE DRAWING

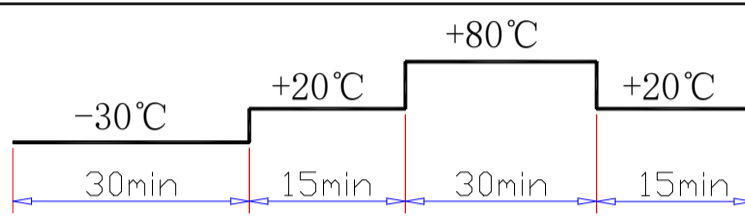
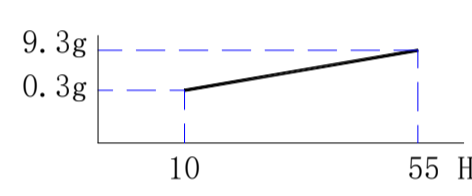


(UNIT:MM)

## 3.FREQUENCY CURVE



## 4.ENVIRONMENTAL TEST

|   | Item                  | Specifications  |
|---|-----------------------|---|
| 4-1   | 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.  |
| 4-2   | 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.  |
| 4-3   | 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.   |
| 4-4   | Thermal cycle test.   |  <p>Make this test for 5 cycles without applying power, then expose to the room temperature for 2 hours.</p>                          |
| 4-5   | Vibration test        |  <p>Amplitude: 1.5mm<br/>Time : 1min/axis</p> <p>Make this test for the directions of X, Y, Z for 2 hours each (total 6 hours).</p> |
| 4-6   | Drop test             | Free drop a unit from the height 100cm to the surface of 10mm thick board ,three directions(X,Y,Z).   |
| 4-7   | Solderability test    | Soldering temp.: $260\pm 5^{\circ}\text{C}$<br>Heat applying time: $3\pm 0.5\text{sec}$ .   |
| <p>PASS CRITERION :</p> <p>After these tests , the change of S.P.L shall be within <math>\pm 5\text{ dB}</math> .</p> |                       |   |

## 5.MEASURING METHOD(BUZZER MODE)

### 5-1 .Test Condition

#### 5-1-1.STANDARD

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

Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

#### 5-1-2.JUDGEMENT

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

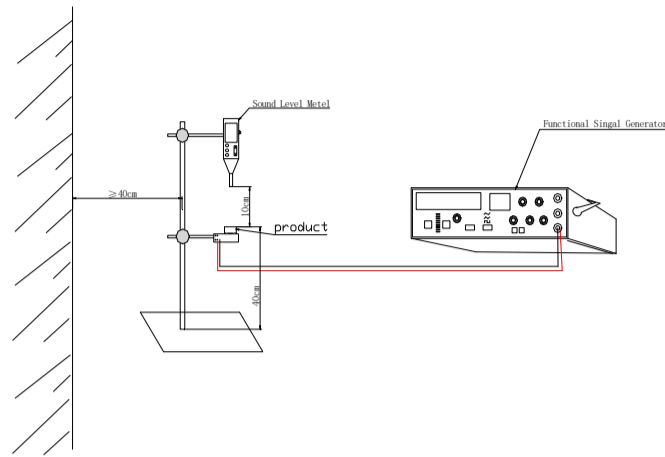
Relative humidity : 45% ~ 85%,

Atmospheric pressure: 860mbar to 1060mbar.

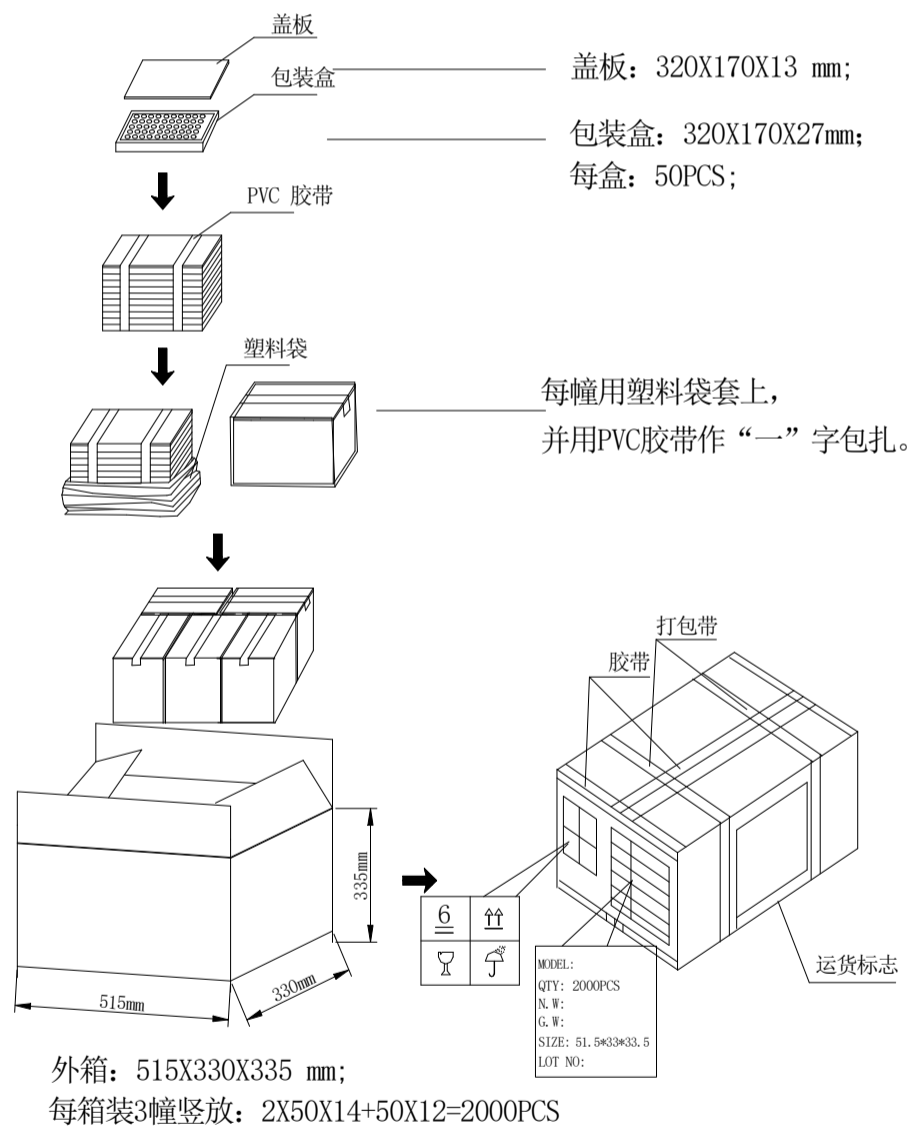
### 5-2. Standard Test Fixture

1.rated Voltage(Square wave):10V

1. Resonant Frequency:4000Hz



## 6.PACKING



外箱用PVC胶带作包扎, 然后用包装带作平行包扎。  
一箱装好后, 根据要求填写内容。