

## PRODUCT SPECIFICATION

| Product Name: |          | Piezo Buzzer      |  |
|---------------|----------|-------------------|--|
| Part          | Number:  | MSPS43B29P33V12DT |  |
|               |          |                   |  |
| Docu          | ment No: |                   |  |
|               |          |                   |  |
| Date:         |          | 2021.05.26        |  |

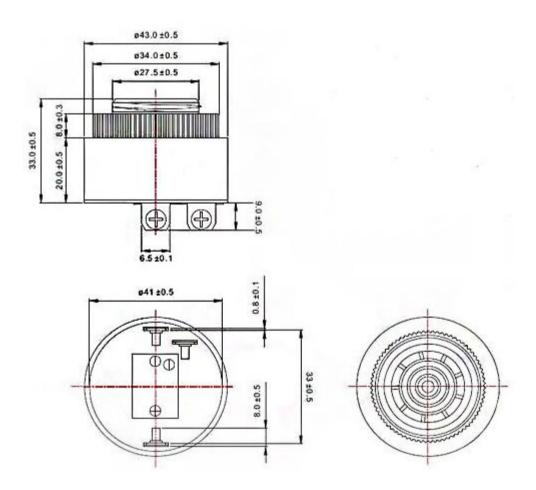
| DRAWING BY | CHECKED BY | APPROVED BY |
|------------|------------|-------------|
| CHEN YUAN  | YUE QIN    | JIN LI      |



### 1.SPECIFICATION

| TYPE                           | MSPS43B29P33V12DT |  |
|--------------------------------|-------------------|--|
| Min. Sound Output at 30cm (dB) | 90                |  |
| Rated Voltage VDC              | 12                |  |
| Operating Voltage VDC          | 6~28              |  |
| Resonant Frequency (Hz)        | 2900+/-500        |  |
| Max. Current Consumption (mA)  | 20                |  |
| Tone Nature                    | Continuous +Pulse |  |
| Operating Temperature (C)      | -20~+80           |  |
| Storage Temperature (C)        | -30~+70           |  |
| Weight (g)                     | 46.5              |  |

#### 2. APPEARANCE DRAWING



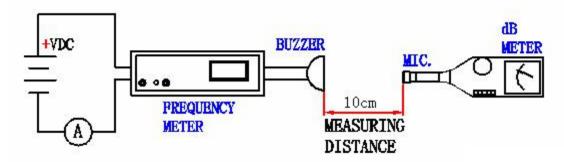
(UNIT:MM)

### **3.TESTING METHOD**

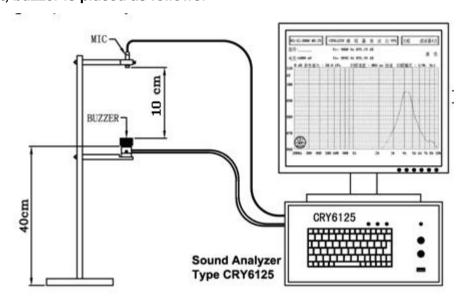
#### **Standard Measurement conditions**

#### **Acoustic Characteristics:**

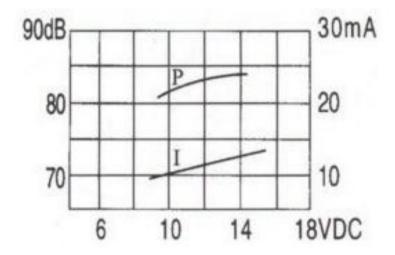
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below



In the measuring test, buzzer is placed as follows:



### **4.FREQUENCY CURVE**



### **5.RELIABILITY TEST**

| NO. | ITEM                               | TEST CONDITION AND REQUIREMENT                                    |  |
|-----|------------------------------------|-------------------------------------------------------------------|--|
|     | High Temperature<br>Test (Storage) | After being placed in a chamber with 70 2°C for 96 hours and then |  |
| 1   |                                    | being placed in normal condition for 2 hours.                     |  |
|     |                                    | Allowable variation of SPL after test: +/-10dB.                   |  |

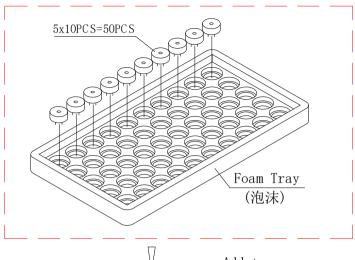


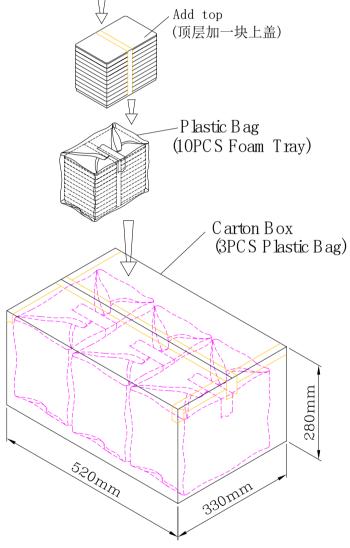
|                          | 2              | Low Temperature<br>Test (Storage)               | After being Placed in a chamber with -30 2°C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: +/-10dB. |  |
|--------------------------|----------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                          |                |                                                 | After being Placed in a chamber with 90-95% R.H. at 40 2°C for                                                                                                   |  |
|                          | 3              | Humidity Test                                   | 96 hours and then being placed in normal condition for 2 hours.                                                                                                  |  |
| -                        |                |                                                 | Allowable variation of SPL after test: +/-10dB.                                                                                                                  |  |
|                          |                |                                                 | The part shall be subjected to 5 cycles. One cycle shall be consist of:                                                                                          |  |
|                          |                |                                                 | +60°C                                                                                                                                                            |  |
|                          |                |                                                 |                                                                                                                                                                  |  |
|                          |                |                                                 | +25°C +25°C                                                                                                                                                      |  |
|                          | 4              | Temperature Cycle                               |                                                                                                                                                                  |  |
|                          | 4              | Test                                            | _ /                                                                                                                                                              |  |
|                          |                |                                                 |                                                                                                                                                                  |  |
|                          |                |                                                 |                                                                                                                                                                  |  |
|                          |                |                                                 | 0.5hr 0.5 0.25 0.5 0.5 0.25                                                                                                                                      |  |
|                          |                |                                                 | 3hours                                                                                                                                                           |  |
|                          |                |                                                 | Allowable variation of SPL after test: +/-10dB.                                                                                                                  |  |
|                          | _              |                                                 | Drop on a hard wood board of 4cm thick, any directions ,3 times,                                                                                                 |  |
|                          | 5              | Drop Test                                       | at the height of 75cm.                                                                                                                                           |  |
| }                        |                |                                                 | Allowable variation of SPL after test: +/-10dB.                                                                                                                  |  |
|                          |                |                                                 | After being applied vibration of amplitude of 1.5mm with 10 to 55 Hz band of vibration frequency to each of 3 perpendicular directions for                       |  |
|                          | 6              | Vibration Test                                  | 2 hours .                                                                                                                                                        |  |
|                          |                | Allowable variation of SPL after test: +/-10dB. |                                                                                                                                                                  |  |
|                          |                |                                                 | Lead terminals are immersed in rosin for 5 seconds and then                                                                                                      |  |
|                          |                | Solderability                                   | immersed in solder bath of +300 5°C for 3 1 seconds .                                                                                                            |  |
| Test 90% min. lead term  |                | •                                               |                                                                                                                                                                  |  |
|                          |                |                                                 | 90% min. lead terminals shall be wet with solder                                                                                                                 |  |
| }                        |                |                                                 | (Except the edge of terminals).  The force of 9.8N(1.0kg) is applied to each terminal in axial                                                                   |  |
|                          | Terminal Stren |                                                 | direction for                                                                                                                                                    |  |
| Pulling Test 10 seconds. |                | _                                               |                                                                                                                                                                  |  |
|                          |                | No visible damage and cutting off.              |                                                                                                                                                                  |  |
| יי                       | L CONDI        | TION                                            |                                                                                                                                                                  |  |

#### TEST CONDITION.

### 6. PACKING STANDARD







| Foam Tray   | 315m m x170m m x28m m  | 1x50PC S=50PC S  |
|-------------|------------------------|------------------|
| Plastic Bag |                        | 10x50PCS=500PCS  |
| Carton Box  | 520m m x330m m x280m m | 3x500PCS=1500PCS |