



# **Product Specification**

# Ningbo East Electronics Limited

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| Product Name: | Magnetic Buzzer |
|---------------|-----------------|
| Part Number:  | EMX-11T05SP     |
| Version:      | 1.02            |
| Date:         | 2019-11-4       |
| Note:         |                 |

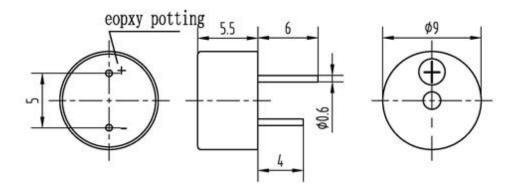
## East is an ISO 9001, IATF16949 and ISO 14001Certified Company

#### **Revision History**

| Rev. | Description                       | Author/Date      | Checked By | Approver |
|------|-----------------------------------|------------------|------------|----------|
| 1.02 | Quality management system revised | 汤礼东<br>2019-11-4 | 吕文斌        | 王建成      |
| 1.01 | Test distance corrections         | 张春雷<br>2014-1-2  | 汤礼东        | 王建成      |
| 1.0  | Released                          | 汤礼东<br>2012-3-23 | 陈启旺        | 王建成      |

#### 1. Part Number EMX-11T05SP

#### 2. Dimension Drawing (Unit: mm)



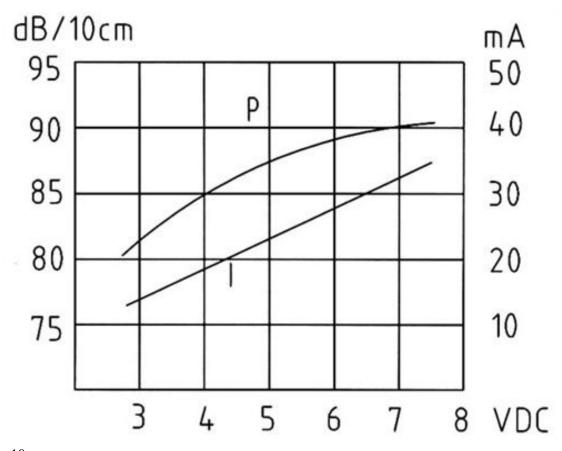
### 3.Specification

| No.  | Item                      | Specification               |
|------|---------------------------|-----------------------------|
| 3-1  | Min. Sound Pressure Level | 80dB/5V <sub>DC</sub> /10cm |
| 3-2  | Rated Voltage             | 5V <sub>DC</sub>            |
| 3-3  | Operating Voltage         | 4~7V <sub>DC</sub>          |
| 3-4  | Max. Consumption          | 50mA/5V <sub>DC</sub>       |
| 3-5  | Oscillating Frequency     | 2.7±0.3 kHz                 |
| 3-6  | Tone Nature               | Continuous                  |
| 3-7  | Operating Temperature     | -20~+70°C                   |
| 3-8  | Storage Temperature       | -30~+80°C                   |
| 3-9  | Weight                    | 1.0g                        |
| 3-10 | Pin Strength              | More than 10N               |

#### **NOTES:**

Test should be made under the conditions of room temperature  $(20\pm10^{\circ}\text{C})$ , normal humidity  $(60\pm20\%)$  and normal atmospheric pressure. In this case, however, that the judgment is questionable, the test conditions are to be changed to room temperature  $20\pm2^{\circ}\text{C}$ , relative humidity  $60\sim70\%$  and normal atmospheric pressure

### **4.**Typical Frequency Response Curve



**Note:**Distance 10 cm

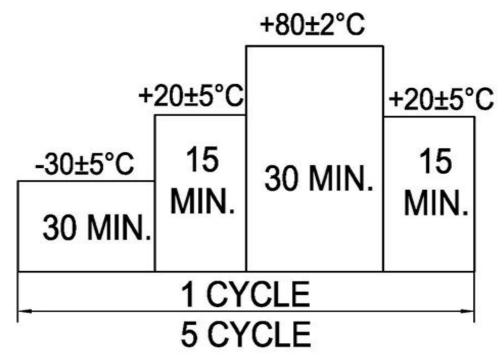
### 5. Reliability Test

| No.                                | Item                                  | Method of Test  | Tolerance after<br>Testing   |
|------------------------------------|---------------------------------------|---|--|
| 5-1                                | Operating<br>Temperature              | -20~+70°C   | Sound pressure level initial value ±10dB  Max. consumption value ±20%  Oscillating frequency value±20% |
| 5-2                                | Storage in high temperature           | Storage in +80°C test box 96 hours then exposed to the room temperature for 2 hours                                   |  |
| 5-3                                | Storage in low temperature            | Storage in -30°C test box 96 hours then exposed to the room temperature for 2 hours                                   |  |
| 5-4                                | Life test in the room temperature     | Operate the product continuously 5 seconds on 5 seconds off 300 hours at rated voltage                                |  |
| 5-5                                | Temperature / humidity cycle test     | Storage in +40°C, 93±3%RH test box 96 hours then exposed to the room temperature for 2 hours                          |  |
| 5-6                                | Temperature (high and low) cycle test | Conduct the test for 5 cycles without applying power then expose to the room temperature for 2 hours.(See Figure 5-6) |  |
| Ningbo East Electronics Limited 3/ |                                       |   |  |

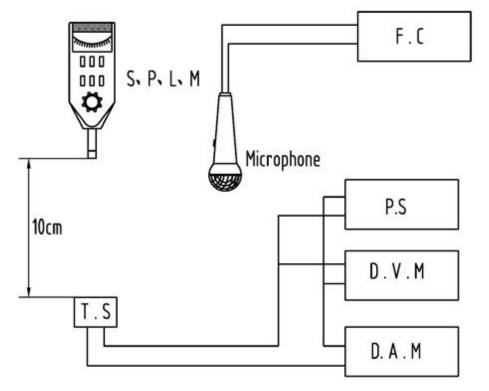
| 5-7  | Vibration test                 | Conduct the test for the directions of X Y and Z for 0.5 hour each (total 1.5 hours). To-and Fri sweep time(from 10 to 55Hz and then 55 to 10) under single amplitude of 0.75mm is 3 minute, then expose to the room temperature for 2 hours |   |
|------|--------------------------------|--|---|
| 5-8  | Drop test                      | Drop a product naturally from the height of 700mm onto the surface of 100mm thick wooden board. Two directions: upper and side of the product are to be applied for this drop test once respectively   |   |
| 5-9  | Soldering heat resistance test | Dip the connecting pins in soldering at 260±5°C for 10±1 seconds   |   |
| 5-10 | Test of soldering              | Dip the connecting pins in soldering at 230±5°C for 3±0.5 seconds  | Solder shall be<br>attached around over<br>95% of the dipped<br>portion |

**NOTE**: The pins are allowed to deform after drop test.

Figure 5-6



#### **6. Electrical Testing Method**



| S.P.L.M | Sound Pressure Level<br>Meter |
|---------|-------------------------------|
| T.S     | Testing Sample                |
| F.C     | Frequency Counter             |
| P.S     | Power Supply                  |
| D.V.M   | DC Voltage Meter              |
| D.A.M   | DC Ampere Meter               |

## 7. Packing Information

Packing: 3000 pcs per export carton

Carton Size: 47× 25×27 cm

G. Weight: 4.5 kgs N. Weight: 3.0 kgs