

# SPECIFICATION FOR APPRONAL

Customer :

Product Name : SMD Buzzer

Model Name : VS1365V5F24

Drawing No. : VS20220729018

# Signature of Voise

| Approved by | Checkde by | Issued by | Date |
|-------------|------------|-----------|------|
|             |            |           |      |



Address:No 96 Mogao Dongqian Lake Industial Area ningbo, China, Tel:0086-0574-87773030;Fax:0086-0574-87471600 P.C.315121 http://www.nbvoise.com Email:sales@nbvoise.com



| Specification for SMD Buzzer | Page         | 2/8           |
|------------------------------|--------------|---------------|
| <u>'</u>                     | Revision No. | 1.0           |
| Model No.: VS1365V5F24       | Drawing No.  | VS20220729018 |

#### **Table of contents**

- 1. Revision
- 2. Scope
- 3. General Characteristics
- 4. Electrical and Acoustic Characteristics.
- 5. Reliability Test
- 6. Measurement Method & Frequency Response curve
- 7. Recommended temperature profile for reflow oven
- 8. Recommended land pattern
- 9. Dimensions
- 10. Packing

#### 1. Revision

| Rev.No. | Date     | Page | Description of Revision |
|---------|----------|------|-------------------------|
| 1.0     | 2019/7/4 |      | Preliminary             |
|         |          |      |                         |
|         |          |      |                         |
|         |          |      |                         |
|         |          |      |                         |
|         |          |      |                         |
|         |          |      |                         |
|         |          |      |                         |
|         |          |      |                         |
|         |          |      |                         |
|         |          |      |                         |
|         |          |      |                         |



| Specification for SMD Buzzer | Page         | 3/8           |
|------------------------------|--------------|---------------|
| <del>'</del>                 | Revision No. | 1.0           |
| Model No.: VS1365V5F24       | Drawing No.  | VS20220729018 |

### 2. Scope

This product specification is applied to the Magnetic Buzzer in alarm systems. Please contact us when using this product for any other applications than described in the above.

#### 3. General Characteristics

3.1 Dimension : 12.8x12,8 mm

3.2 Height : 6.5 mm 3.3 Weight : 2 g

3.4 Operating Temperature :  $-30\sim+70^{\circ}$ C without loss of function 3.5 Store Temperature :  $-40\sim+85^{\circ}$ C without loss of function

3.6 Environmental protection rule: ROHS

#### 4. Electrical and Acoustic Characteristics.

Test condition :15 ~ 35  $^{\circ}$ C Temp., 45% ~ 85% RH,86~106 kPa Refer to IEC60268-1

| No | Items                    | Specification            |
|----|--------------------------|--------------------------|
| 1  | Resonant Frequency       | 2.4±0.5kHz               |
| 2  | Operating Voltage        | 4 ~7 VDC                 |
| 3  | Rated Voltage            | 5.0 VDC                  |
| 4  | Min Sound Preesure Level | 85 at 10cm Rated Voltage |
| 5  | Max Current Consumption  | 30mA at Rated Voltage    |
| 6  | Tone Nature              | Continuous               |
| 7  | Housing Material         | PPS                      |
| 8  | Color                    | Grey                     |



| Specification for SMD Buzzer |             | Page         | 4/8           |
|------------------------------|-------------|--------------|---------------|
|                              |             | Revision No. | 1.0           |
| Model No.:                   | /S1365V5F24 | Drawing No.  | VS20220729018 |

# 5. Reliability Test

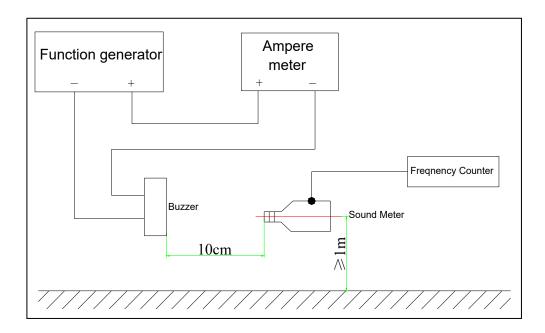
After test(1~5item), the buzzer S.P.L . difference shall be within  $\pm 10 dB$ , and the appearance not exist any change to be harmful to normal operation

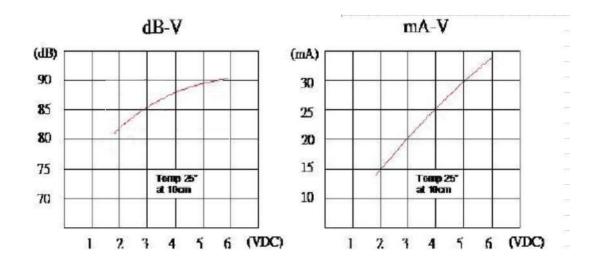
| No | Items                        | Specification  |  |  |
|----|------------------------------|--|--|--|
| 1  | High Temp.Test               | After being placed in a chamber at +80±2 $^{\circ}\mathrm{C}$ for 96h and then being placed in natural condition for 2h, and then check.   |  |  |
| 2  | Low Temp.Test                | First being placed in a chamber at -30±2 $^{\circ}$ C for 96h and then being placed in natural condtion for 2h, and then check.  |  |  |
| 3  | Temp./Humidity Test          | The buzzer shall be subjected to 5 cycles,  One cycle shall be 24 huors and consist of and then being placed in natural conditior +25°C  for 4h ,and then check.   |  |  |
| 4  | Thermal Shock Test           | After being worked in a chamber at +80±2 °C for 0.5 hour, then sounder shall be placed in a chamber at -30±2 °C for 0.5 hour(1 cycle is the below diagram). The test duration is for 10 cycle. after being placed in natural condition for 4 hour. and then check. |  |  |
| 5  | Vibration Test               | Being applied vibration of amplitude of 1.5mm with 10-55Hz band of vibration frequency,X.Y.Z.3 direction.2 hours each, total 6 hours.  |  |  |
| 6  | Drop Test                    | Free drop fram 0.75 meter height to a board 40mm thick hard wood board 3 times in axes X.Y.Z. and be nothing mechanical damage. tatol 9 times.   |  |  |
| 7  | Solderability                | Lead terminals are immersed in solder bath of +235±5°C for 3±1 seconds.95% surface of lead pads must be covered with fresh solder.   |  |  |
| 8  | Soldering Heat<br>Resistance | The product is followed the reflow temperation curve to test its reflow thermostability.No interference in operation.  |  |  |
| 9  | Terminal<br>Strength Pulling | Lead pads shall be soldered on the pc board, and the force 9.8N(1.0kg) shall be applied behaind the part for 10 seconds.No damage and cutting off.   |  |  |
| 10 | Continuous life test         | The part shall be subjected to 72 hours at +65 °C with 3V Vo-p, 2730Hz applied.after being placed in natural condition for 4 hour.and then check. The SPL shall be within ±10dB.   |  |  |
| 11 | Intermittent life<br>test    | A duty cycle of 1 minute on, 1 minute off, a minimum of 5000 times at room temp.(25±10℃) with 3V Vo-p, 2730Hz applied. after being placed in natural condition for 4 hour.and then check. The SPL shall be within ±10dB.   |  |  |



| Specification for SMD Buzzer | Page         | 5/8           |
|------------------------------|--------------|---------------|
| <u>'</u>                     | Revision No. | 1.0           |
| Model No.: VS1365V5F24       | Drawing No.  | VS20220729018 |

## 6. Measurement Method & Frequency Response curve







|  | Fax:0086-0   | 0574-87471600 |
|--|--------------|---------------|
| Specification for SMD Buzzer                     | Page         | 7/8           |
| Model No.: VS1365V5F24                           | Revision No. | 1.0           |
| 7. Dimensions                                    | Drawing No.  | VS20220729018 |
|  | VS1365V5     | F24           |
| 12.8±0.3<br>(+)<br>(-)<br>2.0±0.2<br>VS1365V5F24 | e0.3 Unit:mm |               |
| FIRST ANGLE PROJECTION                           | UNIT         | : mm          |

Tolerance: ±0.2



