RoHS

音 賜 股 份 有 限 公 司

*Ariose Electronics Co., Ltd.*

# SPECIFICATION FOR MAGNETIC BUZZER

Item No.: LF-MB16A12-A

| *Issue Date* | *Issued By* |
|---|---|
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# Specification of Magnetic Buzzer

1. Scope

   This specification is applied to the magnetic buzzer, which are used for alarm systems.

2. Item No.: LF-MB16A12 -A

3. Ratings

- Rated Voltage : 12.0 VDC
- Operating Voltage : 8.0 ~ 15.0VDC
- Current Consumption : 30 mA max. Applying rated voltage.
- Sound Pressure Level : 85dB min. Applying rated voltage at 10cm.
- Resonant Frequency : 2,300 ± 400 Hz
- Operating Temperature : - 20°C ~ + 70 °C
- Storage Temperature : - 30°C ~ + 80 °C
- Case material : NORYL

4. Outline Drawing and Dimensions

   * Appearance: No visible damage and dirt
   * Dimensions: as per Fig. 1

5. Electrical Requirements should be specified at room temperature and humidity.
   (Ref. Temperature: 25 ± 3°C, Humidity: 60 ± 10% RH)

6. Physical Characteristics

| | Test Items | Test Conditions | Performance Requirements |
|---|---|---|---|
| 6-1. | Vibration | Transducer shall be measured after being applied vibration of amplitude of 1.5 mm with 10 to 55 Hz band of vibration frequency to each three mutually perpendicular directions for 2 hours. | The measured values meet Table 1. |
| 6-2. | Drop Test | The buzzer is placed in a normal box, drops testing by 5 times from 75cm height free falling onto concrete floor. | The measured values meet Table 1. |

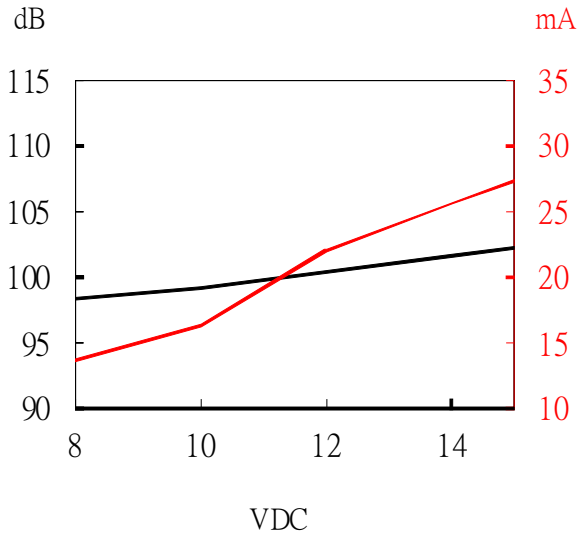
7. Environmental Characteristics

| | Test Items | Test Conditions | Performance Requirements |
|---|---|---|---|
| 7-1. | High Temperature (Static test) | After being placed in a chamber with +80 ± 3°C for 48 hours and then being placed in natural condition for 4 hours without applying power, transducer shall be measured. | The measured values shall meet Table 1. |
| 7-2. | Low Temperature (Static test) | After being placed in a chamber with -30 ± 3°C for 48 hours and then being placed in natural condition for 4 hours without applying power, transducer shall be measured. | |
| 7-3. | Humidity (Static test) | After being placed in a chamber with 90 to 95% R.H. at + 40 ± 3°C for 48 hours and then being placed in natural condition for 4 hours without applying power, transducer shall be measured. | |
| 7-4. | Temperature Cycle (Static test) | Be placed in a chamber at<br>-20℃ ⟶ +20℃ ⟶ +70℃ ⟶ +20℃<br>30min. 15min. 30min. 15min.<br>× 5cycles<br>After above test, transducer shall be measured after being placed in natural condition for 4 hours ; without applying power. | |

Table 1.

| Items | Performance Requirements |
|---|---|
| Sound Pressure Level | Original Level ± 10 dB |
| Current Consumption | Original Value ± 15 % |

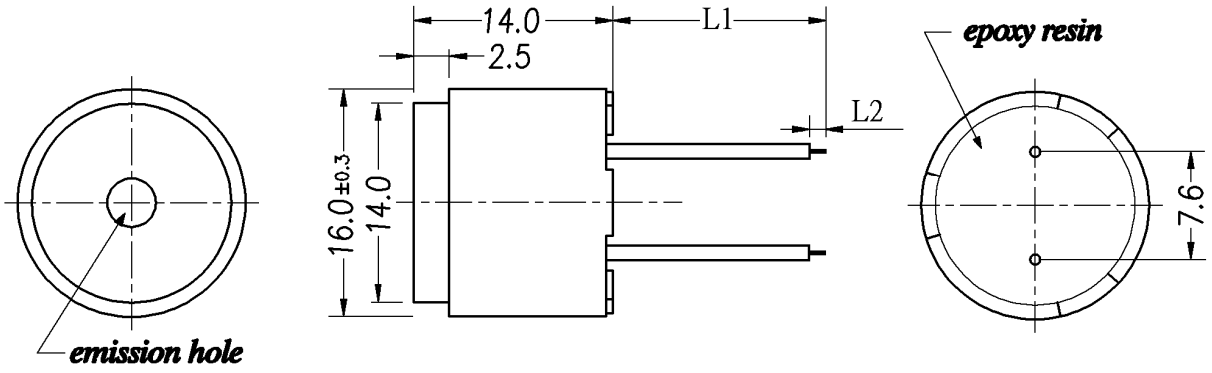
8. Sound Pressure Level and Current Consumption vs. DC Voltage




9. Recommended Solder conditions:

| Item. | Soldering condition | | Application | Attention |
|---|---|---|---|---|
| 9.1 | Manual soldering | Temperature: 350±10°C, maximum 1.5 seconds<br><br>Soldering area: minimum 1.5mm from the body.. | Buzzer | Duration: Minimum 1 minute between soldering positive and negative electrodes. |

Dimensions Unit: mm ± 0.5




Lead Wire:UL1095 AWG28 L1:100±5mm L2:3±1mm

Fig. 1

Test Circuit

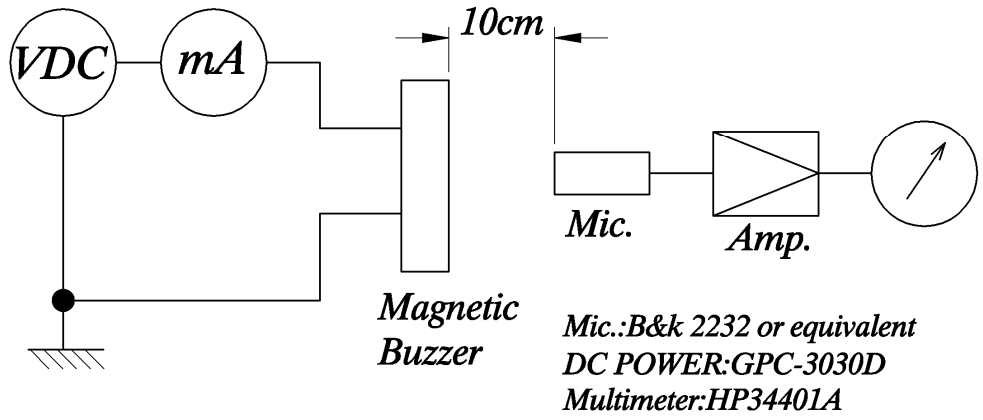



Fig. 2