Piezo Buzzer



1. Scope

This specification is applied to Piezo Buzzer (Self-Drive Type)

The product described below is used as a buzzer in various alarm systems

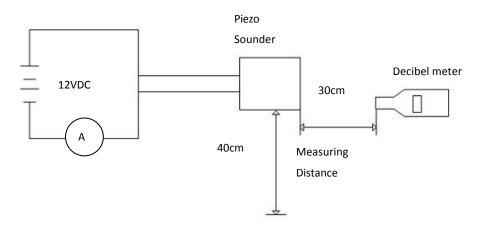
2. Basic Condition

- 2.1 Rated Voltage:12VDC
- 2.2 Operating Voltage:8~16VDC
- 2.3 Operating Temperature Range:-20 ºC~+70 ºC
- 2.4 Storage Temperature Range:-30°C~+80 °C

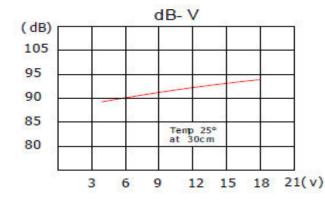


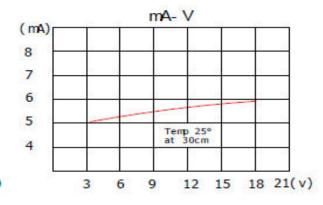
- 3.1 Sound Press Level: ≥90dB at 30cm / 12VDC
- 3.2 Consumption Current: ≤8mA at 12VDC
- 3.3 Resonate Frequency:3800Hz±500Hz
- 3.4 Tone Nature: Continuous Sound
- 3.5 Material: ABS

4. Measuring Method



5. Sound Press Level & Consumption Current Curve







TEST REPORT

| # | dB | mA | Hz |
|---|----|-----|------|
| 1 | 98 | 5.4 | 3926 |
| 2 | 99 | 4.2 | 3941 |
| 3 | 99 | 5.5 | 3890 |
| 4 | 99 | 3.8 | 3957 |
| 5 | 99 | 4.7 | 3866 |

Remark:

(1)Sound Press Level : \geq 90dB at 30cm / 12VDC

(2)Consumption Current : \leq 8mA at 12VDC

(3)Resonate Frequency: 3800Hz±500

6. Environment Test Method

| NO. | ITEM | TEST CONDITION AND REQUIREMENT | |
|-----|--|---|--|
| 1 | High Temperature Test (Storage) | After being placed in a chamber with 80±2°C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: ±10dB. | |
| 2 | Low Temperature Test (Storage) | After being Placed in a chamber with -30 \pm 2 $^{\circ}$ C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: \pm 10dB. | |
| 3 | Humidity Test | After being Placed in a chamber with 90-95% R.H. at 40±2°C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: ± 10dB. | |
| 4 | Temperature Cycle Test | The part shall be subjected to 5 cycles. One cycle shall be consist of: +80°C +25°C -30°C -30°C 0.5 hr 0.5 0.25 0.5 0.5 0.5 0.25 3hours Allowable variation of SPL after test: ±10dB. | |
| 5 | Drop Test | Drop on a hard wood board of 4cm thick, any directions ,6 times, at the height of 100cm. Allowable variation of SPL after test: ± 10 dB. | |
| 6 | Vibration Test | 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 2 hours. Allowable variation of SPL after test: ±10dB. | |
| 7 | Solder ability Test | Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of +300±5°C for 3±1 seconds.90% min. lead terminals shall be wet with solder (Except the edge of terminals). | |
| 8 | Terminal / Wire Strength Pulling Test | The force of 9.8N(1.0kg) is applied to each terminal in axial direction for 10 seconds. No visible damage and cutting off. | |

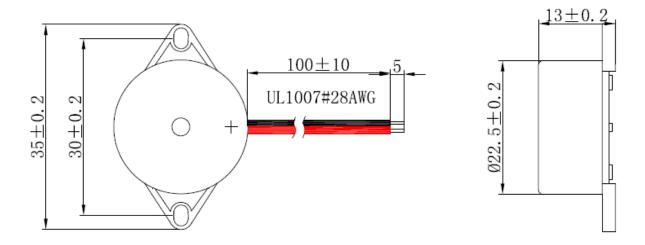
7. Reliability Test

Continuous life test:

250 Hours continuous operating at +70 °C with maximum rated voltage applied . Intermittent life test:

Aduty cycle of 1 minute on, 5 minutes off,a minimum of 10000 times at temperature +25 °C±2

8. Dimensions



Tolerance ±0.5mm