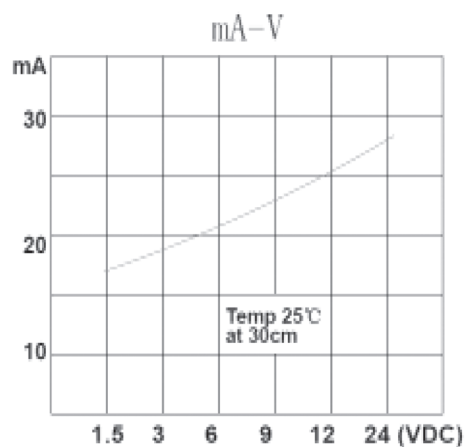
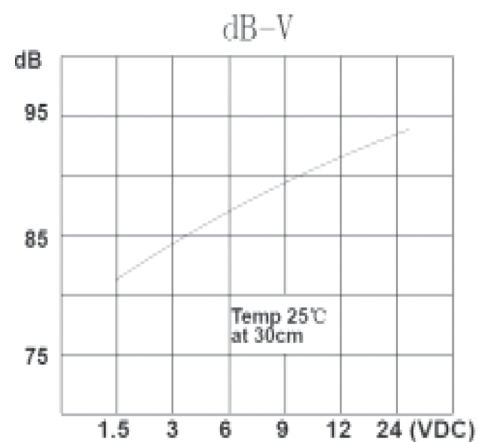


## 1 . Electrical Characteristics

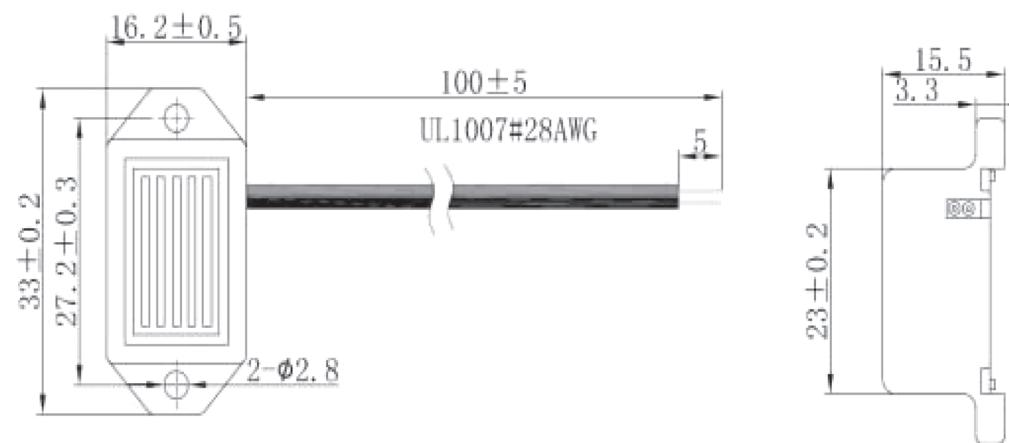
Oscillation Frequency (KHz)	0.4 ±0.1
Operating Voltage (Vdc)	8 ~ 16
Rated Voltage (Vdc)	12
Current Consumption (mA/max.)	30 at Rated Voltage
Sound Pressure Level (dB/min.)	88 at 30cm at Rated Voltage
Tone/Pulse Rate	Constant
Operating Temperature (°C)	-20 ~ +70
Storage Temperature (°C)	-30 ~ +85

## 2 . Voltage/ Current / Sound Pressure



## 3 . Dimensions and Material

### 3-1 Shape



Tolerance : ±0.5mm

### 3-2 Material

Housing	ABS(Color : White)
Leading Wire	28 AWG
Weight (Gram)	7.8

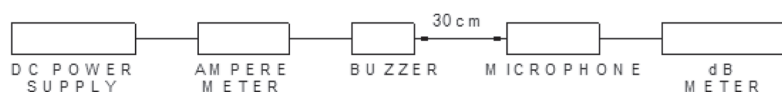
#### 4. TESTING METHOD

##### • Standard Measurement conditions

Temperature:  $25 \pm 2^\circ\text{C}$  Humidity: 45-60%

##### • Acoustic Characteristics

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



#### 5. RELIABILITY

ITEMS	TEST CONDITION AND REQUIREMENT
High Temperature Test (Storage)	After being placed in a chamber with $85 \pm 2^\circ\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$ .
Low Temperature Test (Storage)	After being placed in a chamber with $-30 \pm 2^\circ\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$ .
Humidity Test	After being placed in a chamber with 90-95% R.H. at $40 \pm 2^\circ\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$ .
Temperature Cycle Test	<p>The part shall be subjected to 5 cycles. One cycle shall be consist of :</p> <p>Allowable variation of SPL after test: 10dB</p>

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: $\pm 10\text{dB}$
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: $\pm 10\text{dB}$
Solder ability Test	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of $+270 \pm 5^\circ\text{C}$ for $5 \pm 1$ seconds. 90% min. lead terminals shall be wet with solder. Hand Soldering $360 \pm 5^\circ\text{C}$ for 1.5 Sec. Recommend using constant searing-iron
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

#### 6. PACKAGE METHOD

- <1> 100pcs per box , Total 10 boxes per carton , total 1000pcs per carton;  
Volume: L\*W\*H=520\*335\*290mm  
<2> N . W . : ; 15.6KGS ; G . W . : 17.6KGS;  
<3> RoHS Mark