

# Specification of Piezoelectric Buzzer

## 1. Scope

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

## 2. Item No.:

LF-PB42W29A

勝特力材料 886-3-5753170  
勝特力电子(上海) 86-21-34970699  
勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

## 3. Ratings

- \* Operating Temperature Range: - 20 °C ~ + 85°C
- \* Storage Temperature Range: - 40 °C ~ + 85°C
- \* Operating Voltage: 3.0 to 30 VDC
- \* Case material: PC UL94HB

## 4. Outline Drawing and Dimensions

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

## 5. Electrical Requirements

	Items	Specifications	Test Conditions
5-1.	Sound Pressure Level	102 dB min. Continuous Tone	Input Voltage: 9.0V DC Distance: 10 cm *As per Fig. 2
5-2.	Oscillating Frequency	2.9 ± 0.5KHz	
5-3	Current Consumption	9.0mA max.	At 9.0V DC

## 6. Physical Characteristics

	Test Item	Test Conditions	Performance Requirements
6-1.	Vibration	Buzzer 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 shall meet Table 1.

## 7. Environmental Characteristics

	Test Items	Test Conditions	Performance Requirements
7-1.	High Temperature	After being placed in a chamber with $+85 \pm 3^{\circ}\text{C}$ for 48 hours and then being placed in natural condition for 4 hours without applying power, buzzer shall be measured.	The measured values shall meet Table 1.
7-2.	Low Temperature	After being placed in a chamber with $-40 \pm 3^{\circ}\text{C}$ for 48 hours and then being placed in natural condition for 4 hours without applying power, buzzer shall be measured.	
7-3.	Humidity	After being placed in a chamber with 90 to 95% R.H. at $+40 \pm 3^{\circ}\text{C}$ for 48 hours and then being placed in natural condition for 4 hours without applying power, buzzer shall be measured.	
7-4.	Temperature Cycle	After being placed in a chamber at $-20 \pm 3^{\circ}\text{C}$ for 30 minutes, buzzer shall be placed at room temperature ( $+20^{\circ}\text{C}$ ). After 15 minutes at this temperature, buzzer shall be placed in a chamber at $+85 \pm 3^{\circ}\text{C}$ . After 30 minutes at this temperature, buzzer shall be returned to room temperature ( $+20^{\circ}\text{C}$ ) for 15 minutes. After 5 above cycles, buzzer shall measure after being placed in natural condition for 4 hours without applying power.	

Table 1

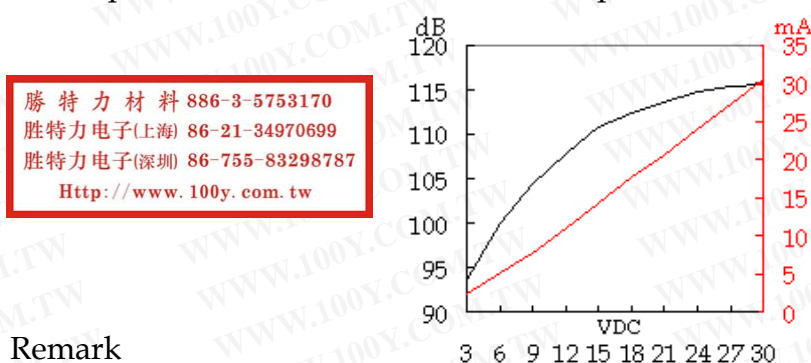
Items	Performance Requirements
Sound Pressure Level	Initial Value $\pm 10$ dB

## 8. Others

8-1. This specification mentions the quality of the component as a single unit. Please insure the component is thoroughly evaluated in your application circuit.

8-2. Please do not use this component in any application that deviates from its intended use as noted within the specification. It may cause any mishaps.

## 9. Sound pressure level and current consumption vs. DC voltage:

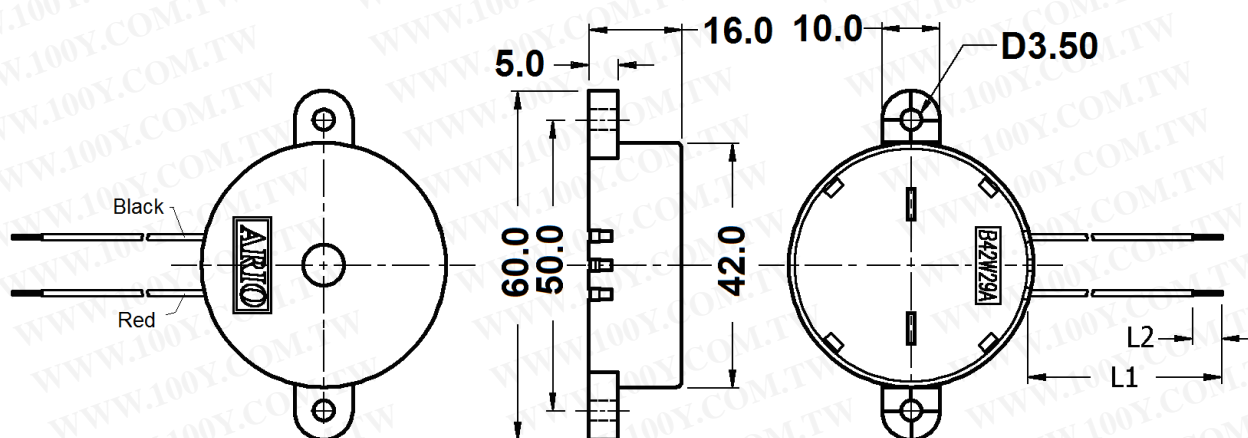


## 10. Remark

因環保規範、材料取得、製程精進等因素，在規格特性未變更下，本公司得就材料逕行調整，毋須通知客戶。

At the same spec of material changed without notice, due to the environmental protection, material sources and process improvement norms etc.

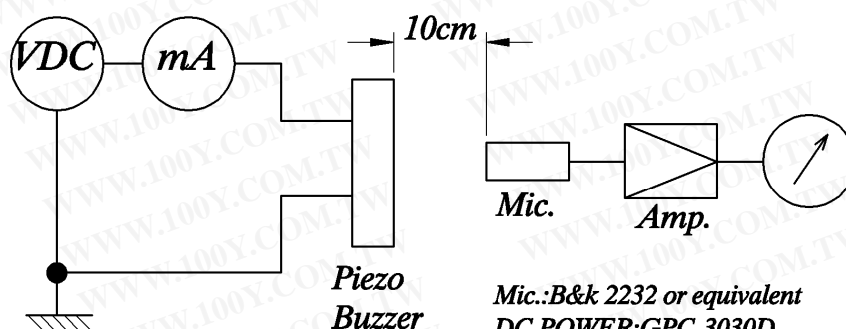
Dimensions Unit: mm  $\pm 0.5$



Lead Wire: UL 1007 AWG26 L1:125 $\pm$ 5mm L2:5 $\pm$ 2mm

Fig. 1

## Test Circuit



Mic.: B&k 2232 or equivalent  
DC POWER: GPC-3030D  
Multimeter: HP34401A