SPECIFICATION FOR PIEZOELECTRIC BUZZER

1. Scope

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

2. Item No.: LF-PB42W29A

3. Ratings

   * Operating Temperature Range: - 20 °C ~ + 105°C/9VDC;96hrs
   * Storage Temperature Range: - 40 °C ~ + 105°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

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

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 ± 2°C for 240 hours and then being placed in natural condition for 4 hours, buzzer shall be measured.	The measured values shall meet Table 1.
7-2.	Low Temperature	After being placed in a chamber with -40 ± 2°C for 240 hours and then being placed in natural condition for 4 hours, buzzer shall be measured.	
7-3.	Humidity	After being placed in a chamber with 90 to 95% R.H. at + 40 ± 2°C for 240 hours and then being placed in natural condition for 4 hours, buzzer shall be measured.	
7-4.	Temperature Cycle	After being placed in a chamber at -40 ± 2°C for 30 minutes, buzzer shall be placed at room temperature (+20°C). After 15 minutes at this temperature, buzzer shall be placed in a chamber at +85 ± 2°C. After 30 minutes at this temperature, buzzer shall be returned to room temperature (+20°C) for 15 minutes. After 5 above cycles, buzzer shall measure after being placed in natural condition for hours.	

Table 1

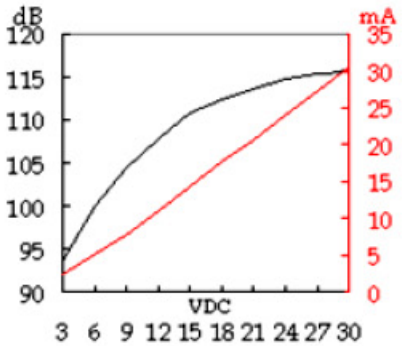
Items	Performance Requirements
Sound Pressure Level	Initial Value ± 10 dB

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.

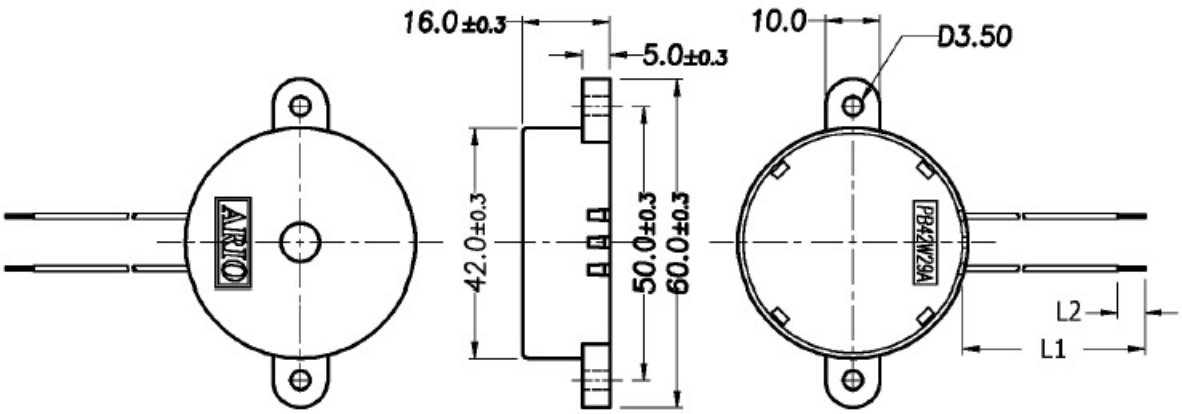
9. Sound pressure level and current consumption vs. DC voltage:



10. Remark

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

Dimensions Unit: mm ± 0.2



Lead Wire: UL 1007 AWG26 L1:125±5mm L2:5±2mm

Fig. 1

Test Circuit

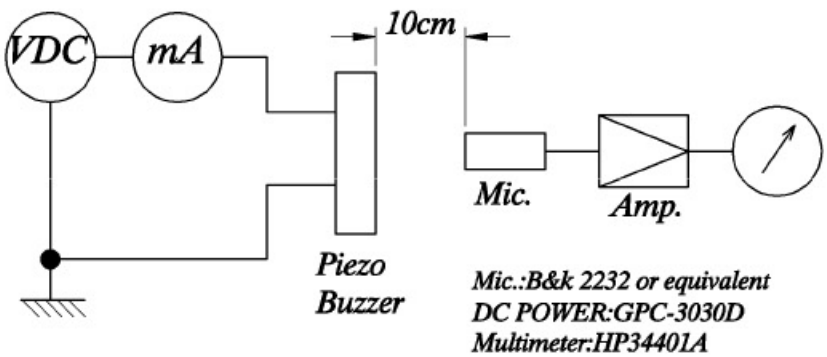


Fig. 2