Specification of Piezoelectric Buzzer

1. Scope

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

2. Item No.: LF-PB43P28A

3. Ratings

   * Operating Temperature Range: - 20 °C ~ + 60°C
   * Storage Temperature Range: - 30 °C ~ + 70°C
   * Operating Voltage: 4.0 to 28.0 VDC
   * Case material: ABS

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	95 dB min. Continuous Tone	Input Voltage: 9.0V DC Distance: 10 cm *As per Fig. 2
5-2.	Oscillating Frequency	2.8 ± 0.5KHz	
5-3	Current Consumption	6mA 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 (Static test)	After being placed in a chamber with +70 ± 3°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 (Static test)	After being placed in a chamber with -20 ±3°C for 48 hours and then being placed in natural condition for 4 hours without applying power, buzzer 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. Then, being placed in natural condition for 4 hours without applying power, buzzer shall be measured.	
7-4.	Temperature Cycle (Static test)	Be placed in a chamber at -20℃ ⟶ +25℃ ⟶ +60℃ ⟶ +25℃ 30min. 15min. 30min. 15min. × 5cycles After above test, buzzer shall be measured after being placed in natural condition for 4 hours ; without applying power.	

Table 1

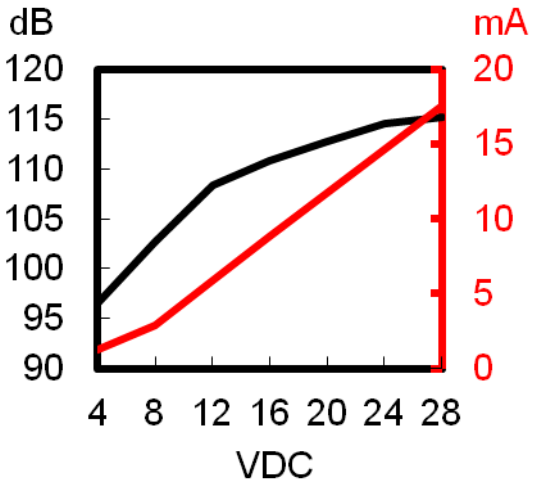
Items	Performance Requirements
Sound Pressure Level	Initial Value ± 10 dB

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:



Dimensions Unit: mm ± 0.5

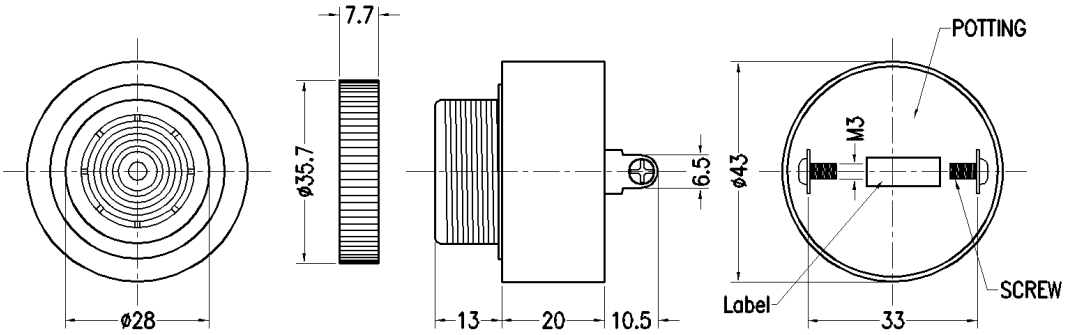


Fig. 1

Test Circuit

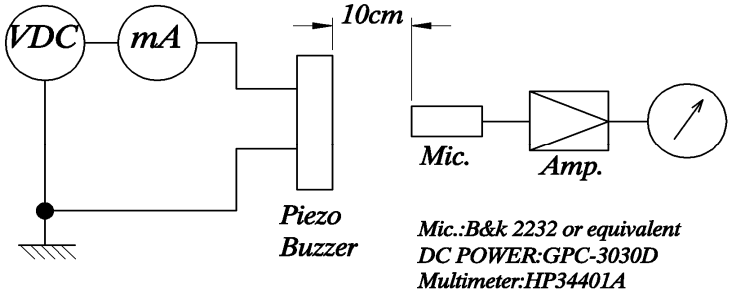


Fig. 2