

## Features

- Piezo buzzer
- 3-20VDC
- Rated voltage 12VDC
- With PCB pins
- Sound output  $\geq 85\text{dB}$
- With internal drive circuit
- Diameter 24mm, Height 16mm

## RS PRO 90dB, Continuous Tone, Piezo Buzzer with PCB pins

RS Stock No.:  
617-3075 ,171-0868



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

**This continuous tone piezo buzzer operates between 3-20VDC. It doesn't need external circuitry to produce a sound as it has its own internal circuit and just requires a DC voltage. The sound output is a minimum of 85dB.**

### **APPLICATIONS:**

- Access & security
- Medical
- Home appliances
- Toys & games
- Consumer electronics
- Timers
- Load monitors & pressure gauges
- Agricultural system monitoring
- Alarms within automotive applications such as seat belt, tyre pressure, temperature warnings
- Sensing & instrumentation
- Communications equipment
- Remote monitoring systems
- Safety products

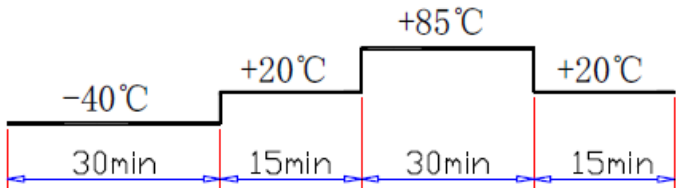
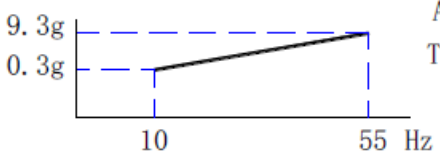
## 1. ELECTRICAL AND ACOUSTICAL SPECIFICATION

	Item	Unit	Specifications
1-1	Rated Voltage	VDC	12
1-2	Operating Voltage	VDC	3-20
1-3	* Rated Current (Max)	mA	8
1-4	* Min Sound Output at 30cm	dB	85
1-5	* Resonant Frequency	Hz	2900±500
1-6	Tone Nature		Single
1-7	Operating Temperature	°C	-30~+70
1-8	Storage Temperature	°C	-40~+85
1-9	Weight	g	6
1-10	Housing Material		Black Noryl
1-11	Lead Pin Material		Red Copper (DSn)

\*Value applying at rated voltage DC

With internal drive circuit

## 2.ENVIRONMENTAL TEST

	Item	Specifications
2-1	Storage in High temp.	Storage in $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
2-2	Storage in Low temp.	Storage in $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
2-3	Storage in Humidity	Storage in $+40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 90-95%RH test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
2-4	Thermal cycle test.	 <p>Make this test for 5 cycles without applying power, then expose to the room temperature for 2 hours.</p>
2-5	Vibration test	 <p>Make this test for the directions of X,Y, Z for 2 hours each (total 6 hours).</p>
2-6	Drop test	Free drop a unit from the height 70cm to the surface of 10mm thick board ,three directions(X,Y,Z).
2-7	Solderability test	Soldering temp.: $260 \pm 5^{\circ}\text{C}$ Heat applying time: $3 \pm 0.5\text{sec}$ .
<p>PASS CRITERION :</p> <p>After these tests , the change of S.P.L shall be within <math>\pm 5\text{ dB}</math> .</p>		

## 3. MEASURING METHOD (BUZZER MODE)

### 3-1. Test Condition

#### 3-1-1. STANDARD

Temperature :  $25 \pm 3^\circ\text{C}$

Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

#### 3-1-2. JUDGEMENT

Temperature :  $15 \sim 35^\circ\text{C}$

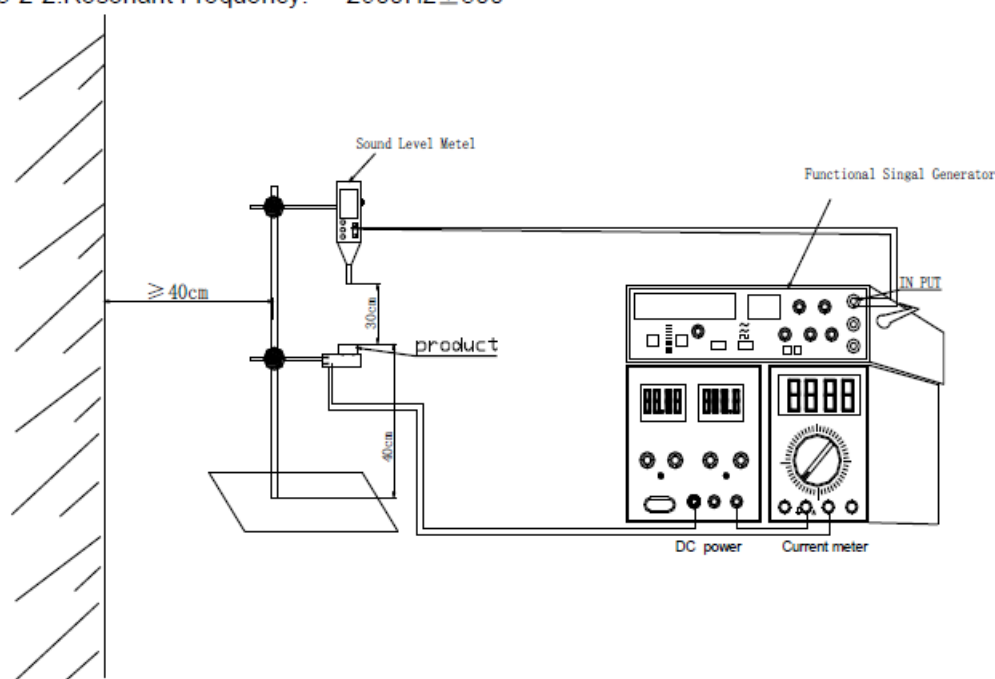
Relative humidity : 45% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

### 3-2. Standard Test Fixture

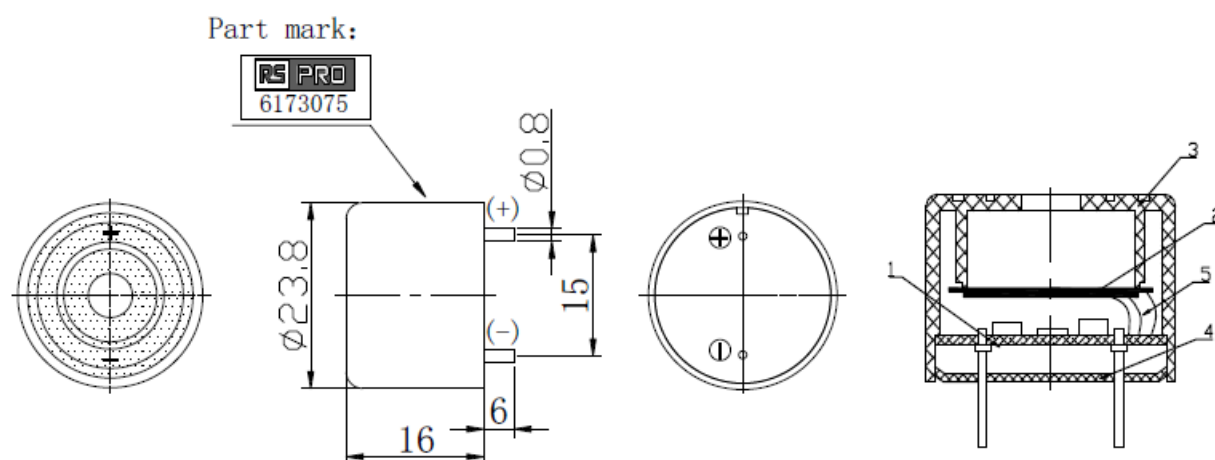
#### 3-2-1. Rated Voltage: 12VDC

#### 3-2-2. Resonant Frequency: $2900\text{Hz} \pm 500$



## 4.DIMENSIONS

Unless otherwise specified,tolerance:  $\pm 0.5$ (unit:mm)



- 1) All parts must be meet to ROHS.
- 2) Wave solder and wash not allowed.

5	Lead Wire	3		
4	Cover	1	Black Noryl	
3	Housing	1	Black Noryl	
2	Piezo element	1	Brass	
1	PCB	1	Epoxy Board	
Part No.	Part Name	Q'TY	Material	Remark