

## Features

- Piezo buzzer
- 1-30Vp-p
- Rated voltage 9Vp-p
- With PCB pins
- Sound output  $\geq 85\text{dB}$
- Requires additional circuitry to generate sound
- Diameter 24mm, Height 7.5mm

## RS PRO Piezo Buzzer 1-30Vp-p, 85dB, PCB Pins

RS Stock No.: 6173047



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

**A continuous tone buzzer generating a sound output of more than 85dB. It has PCB pins and is wave solderable. The voltage range is 1-30Vp-p and it has very low current consumption. This buzzer requires additional circuitry to generate sound.**

### **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

## Electrical Specifications

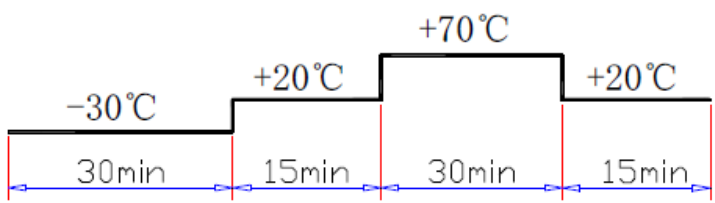
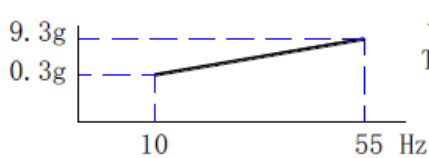
### 1. ELECTRICAL AND ACOUSTICAL SPECIFICATION

	Item	Unit	Specifications
1-1	Rated Voltage (Square Wave)	Vp-p	9
1-2	Operating Voltage	Vp-p	1-30
1-3	* Rated Current (Max)	mA	3
1-4	* Min Sound Output at 4.0kHz/10cm	dB	85
1-5	* Resonant Frequency	Hz	4000
1-6	Capacitance at 120Hz	pF	17000±30%
1-7	Operating Temperature	°C	-20~+60
1-8	Storage Temperature	°C	-30~+70
1-9	Weight	g	3
1-10	Housing Material		Black ABS
1-11	Lead Pin Material		Red Copper (DSn)
1-12	Tone Nature		Single

\* Value Applying at Rated Voltage (resonant frequency, 1/2 duty, square wave)

Requires additional circuitry to operate as a sounder

## 2. ENVIRONMENTAL TEST

	Item	Specifications
2-1	Storage in High temp.	Storage in $+70^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 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 $-30^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 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>Amplitude: 1.5mm Time : 1min/axis</p> <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><b>PASS CRITERION :</b></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 :  $15 \sim 35^{\circ}\text{C}$

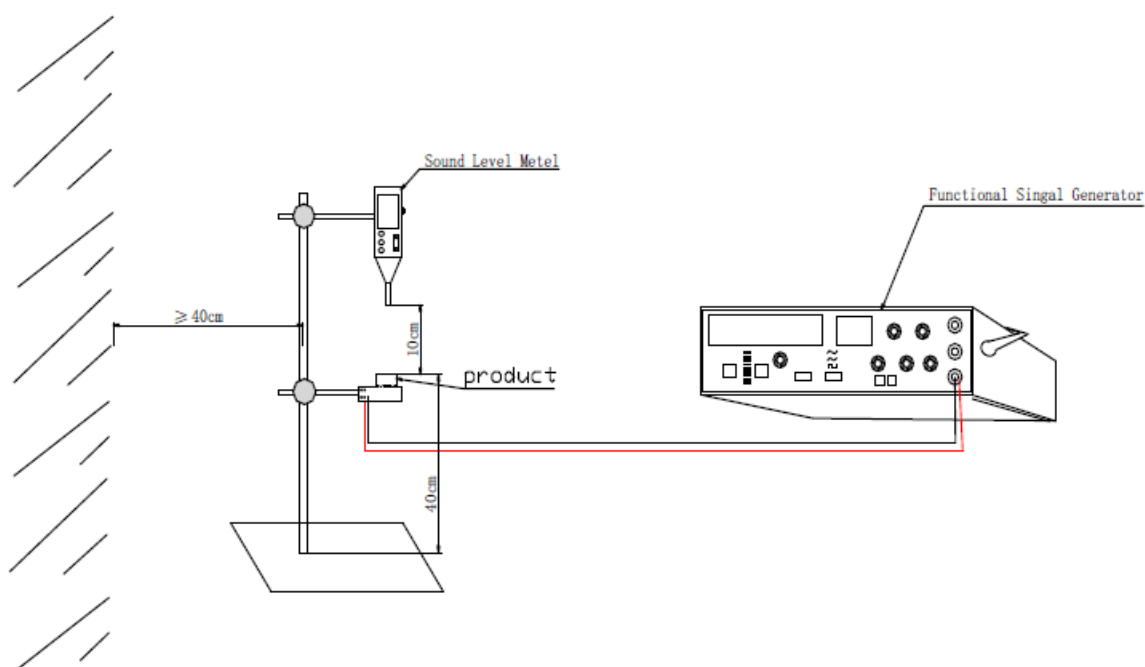
Relative humidity : 45% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

### 3-2 . Standard Test Fixture

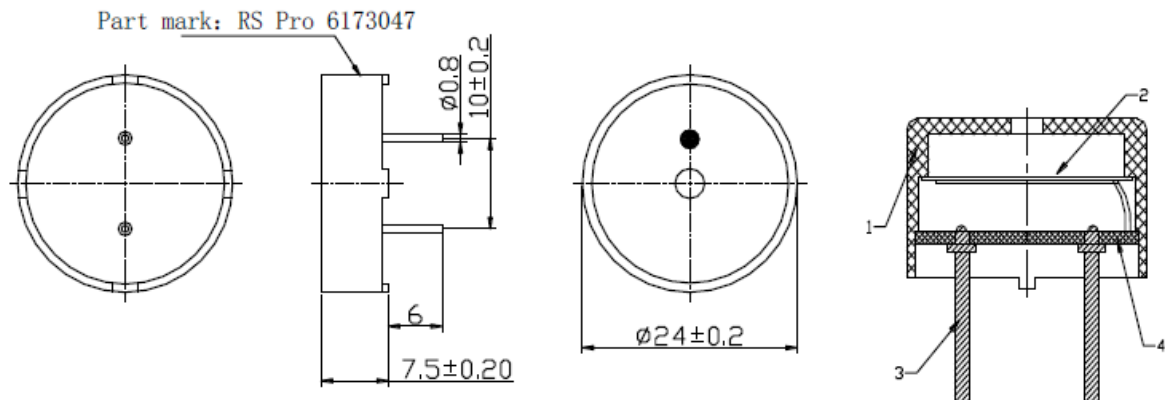
1. rated Voltage (Square wave): 9V

2. Resonant Frequency: 4000Hz



## 4.DIMENSIONS

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



**Note: manual soldering temperature  $380 \pm 20^\circ\text{C}$**

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

Part No.	Part Name	Q'TY	Material	Remark
4	PCB	1	Epoxy Board	
3	Lead Pin	2	Red Copper(DSn) (Coating $4-8 \mu\text{m}$ )	
2	Piezo element	1	Brass	
1	Housing	1	Black ABS	