

Features

- Piezo buzzer
- 1-20Vp-p
- Rated voltage 5Vp-p
- With PCB pins
- Sound output $\geq 80\text{dB}$
- Requires additional circuitry to generate sound
- Diameter 13.8mm, Height 6.8mm

RS PRO Piezo Buzzer 1-20Vp-p, 80dB, PCB Pins

RS Stock No.: 5117670



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 small, continuous tone, piezo buzzer fitted with PCB pins. It operates within a voltage range of 1-20Vp-p and requires additional circuitry to generate sound. Power consumption is extremely low at 1mA. This is a popular buzzer, used within a wide variety of applications.

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

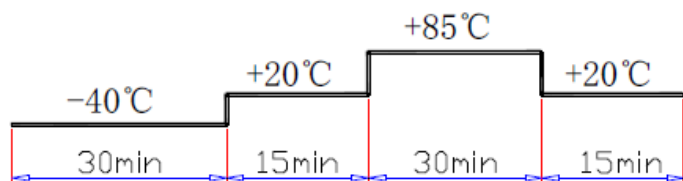
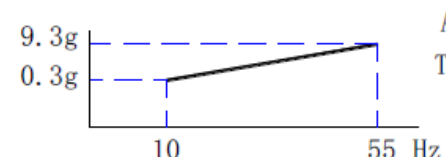
1. ELECTRICAL AND ACOUSTICAL SPECIFICATION

	Item	Unit	Specifications
1-1	Rated Voltage (Square Wave)	Vp-p	5
1-2	Operating Voltage	Vp-p	1-20
1-3	* Rated Current (Max)	mA	1
1-4	* Min Sound Output at 4.0kHz/10cm	dB	80
1-5	* Resonant Frequency	Hz	4000
1-6	Capacitance at 120Hz	pF	13000±30%
1-7	Operating Temperature	°C	-30~+70
1-8	Storage Temperature	°C	-40~+85
1-9	Weight	g	1
1-10	Housing Material	Black NORYL	
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 $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 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>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>PASS CRITERION :</p> <p>After these tests , the change of S.P.L shall be within $\pm 5\text{ dB}$.</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 : $15 \sim 35^{\circ}\text{C}$

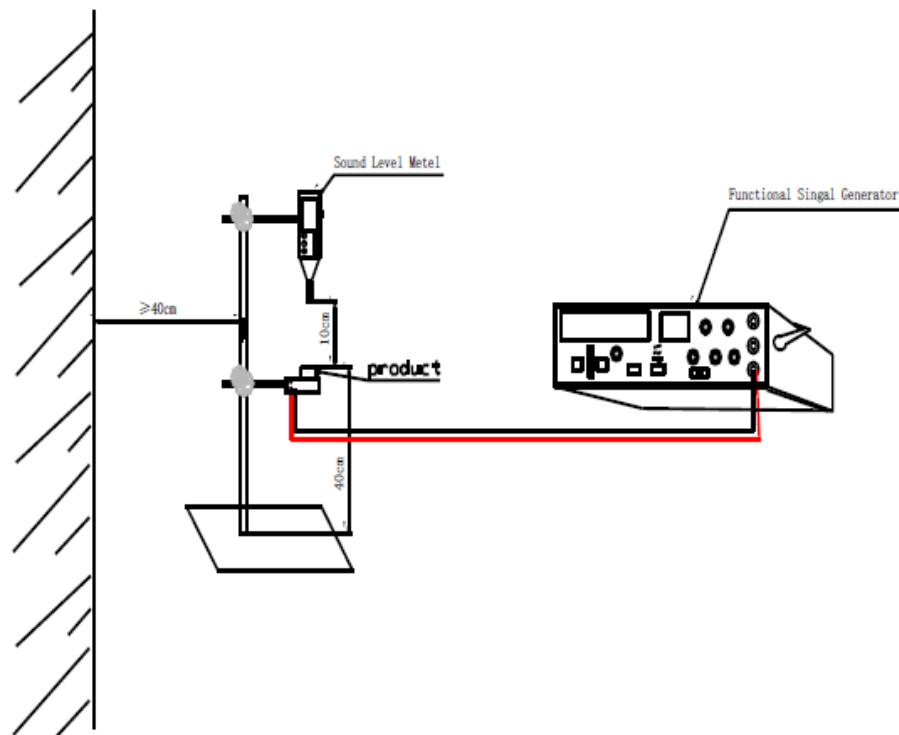
Relative humidity : 45% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

3-2 . Standard Test Fixture

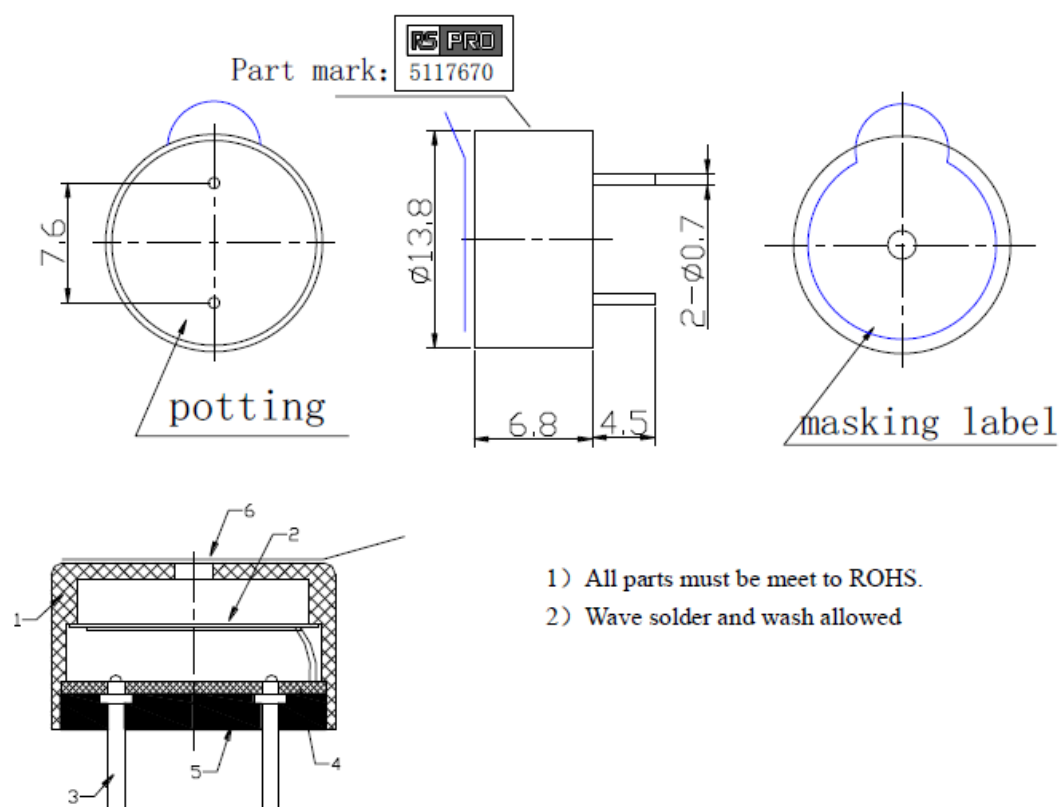
3-2-1. rated Voltage (Square wave): 5V

3-2-2. Resonant Frequency: 4000Hz



4.DIMENSIONS

Unless otherwise specified, tolerance: ± 0.5 (unit:mm)



- 1) All parts must be meet to ROHS.
- 2) Wave solder and wash allowed

Part No.	Part Name	Q'TY	Material	Remark
6	Masking label	1	paper	
5	Epoxy		Resin	
4	PCB	1	Epoxy Board	
3	Lead Pin	2	Red Copper(DSn)	
2	Piezo element	1	Nickel	
1	Housing	1	Black NORYL	
Part No.	Part Name	Q'TY	Material	Remark