

Features

- Electro mechanical buzzer
- Surface mount
- 3-8Vp-p
- Rated voltage 5Vp-p
- Sound output $\geq 87\text{dB}$
- Requires additional circuitry to generate sound
- 12.8 x 12.8 x 7.1mm

RS PRO Surface Mount Buzzer 3-8Vp-p, 87dB, 12.8x12.8x7.1mm

RS Stock No.: 0737628, 0737629



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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, surface mount buzzer. It is a very small device, with a voltage range of 3-8Vp-p. This buzzer generates a sound output of more than 87dB and is reflow solderable. The reflow solder curve is provided at the end of this data sheet. This product 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

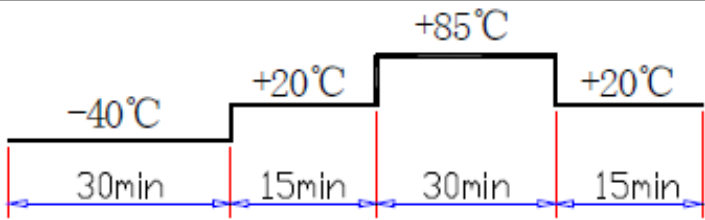
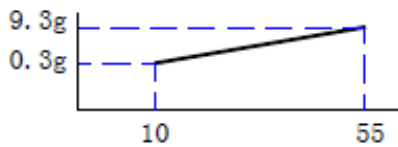
1. ELECTRICAL AND ACOUSTICAL SPECIFICATION

	Item	Unit	Specifications
1-1	Rated Voltage (Square Wave)	Vp-p	5
1-2	Operating Voltage	Vp-p	3-8
1-3	* Rated Current (Max)	mA	40
1-4	* Min Sound Output at 10cm	dB	87
1-5	* Resonant Frequency	Hz	2400
1-6	Coil Resistance	Ω	45 ± 5
1-7	Operating Temperature	$^{\circ}\text{C}$	-40~+85
1-8	Storage Temperature	$^{\circ}\text{C}$	-40~+85
1-9	Weight	g	2
1-10	Housing Material		PPS
1-11	Lead Pin Material		Brass

* 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.	 Make this test for 5 cycles without applying power, then expose to the room temperature for 2 hours.
2-5	Vibration test	 Amplitude: 1.5mm Time : 1min/axis Make this test for the directions of X, Y, Z for 2 hours each (total 6 hours).
2-6	Drop test	Free drop a unit from the height 100cm 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: $3 \pm 0.5\text{sec.}$
PASS CRITERION : After these tests, the change of S.P.L shall be within $\pm 5\text{ dB}$.		

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%,

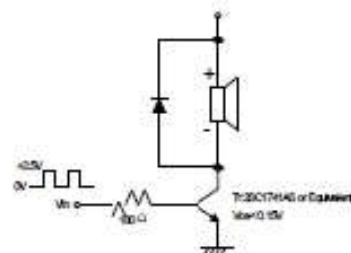
Atmospheric pressure : 860mbar to 1060mbar.

3-2 . Standard Test Fixture

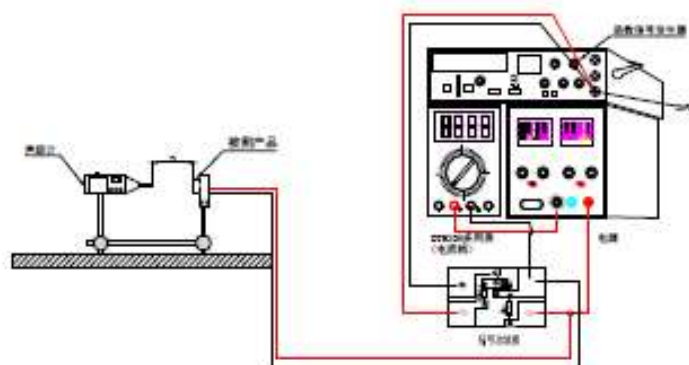
3-2-1.rated Voltage(Square wave):5V

3-2-2.Resonant Frequency:2400Hz

3-2-3.standard Drive Circuit:

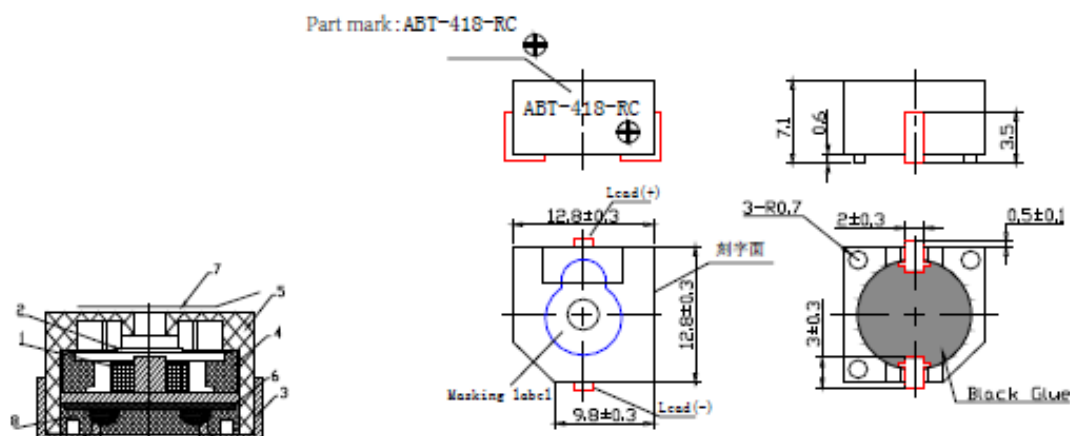


3-2-4.standard test fixture:



4.DIMENSIONS

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



Cadmium(Cd)/Cadmium Compounds	≤100ppm
Lead (Pb) / Lead Compounds	≤800ppm
Mercury (Hg) Mercury Compounds	≤800ppm
Hexavalent-Chromium (Cr6+) Compounds	≤800ppm
PBB	≤800ppm
PBDE	≤800ppm
DIBP	≤500ppm
DEHP	≤500ppm
DBP	≤500ppm
BBP	≤500ppm

All parts must be meet to ROHS. 1) Reflow solder allowed and wash not allowed.

8	Potting		Black Glue	
7	Masking label	1	Paper	
6	PCB	1	Epoxy	
5	Housing	1	PPS	
4	Magnet	1	High Temperature Plastic magnetism	
3	LEAD PIN	2	Brass	
2	Diaphragm	1	Iron	
1	Coil Part	1	Copper And Iron	
Part No.	Part Name	Q'TY	Material	Remarks

5.REFLOW SOLDERING CURVE

