Piezo Buzzer Components

Features

- Piezo element with mounting ring
- 30Vp-p
- With leads
- Sound output ≥70dB
- Requires additional circuitry to generate sound
- Diameter 48mm, Height 2.2mm

RS PRO Piezo Element 30Vp-p, 70dB, with leads

RS Stock No.: 1797433



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.

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Product Description

This is a bare piezo element. It consists of a piezoelectric ceramic mounted on to a brass disc. It is also fitted with a mounting ring which surrounds the piezo element and 100mm leads. Piezo elements have low current consumption. They give design engineers the freedom to design their own housing to generate the required sound output for their application.

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

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Electrical Specifications

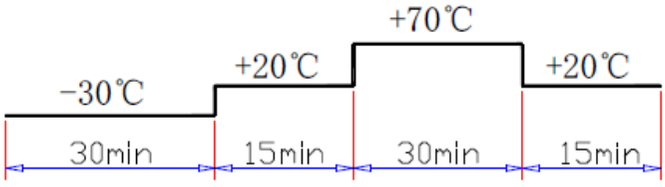
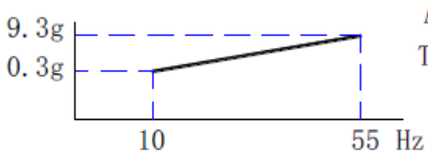
1. ELECTRICAL AND ACOUSTICAL SPECIFICATION

	Item	Unit	Specifications
1-1	Input Voltage（Max.）	Vp-p	30
1-2	Impedance at 1KHZ	Ω	300
1-3	Frequency Range	Hz	500~2000
1-4	＊Min Sound Output at 1.2kHz/10cm/12Vp-p Square Wave	dB	70
1-5	＊Resonant Frequency	Hz	1200
1-6	Capacitance at 120Hz	pF	65000±30%
1-7	Operating Temperature	℃	-20~+60
1-8	Storage Temperature	℃	-30~+70
1-9	Weight	g	3.0
1-10	Housing Material		Black ABS
1-11	Lead Wire		UL1571 AWG30
1-12	Tone Nature		Single

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

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2.ENVIRONMENTAL TEST

	Item	Specifications
2-1	Storage in High temp.	Storage in +70℃±2℃ 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℃±2℃ 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℃±2℃ 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	 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 70cm to the surface of 10mm thick board ,three directions(X,Y,Z).
PASS CRITERION : After these tests , the change of S.P.L shall be within ±5 dB .		

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3.MEASURING METHOD(BUZZER MODE)

3-1 .Test Condition

3-1-1.STANDARD

Temperature : 25±3℃

Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

3-1-2.JUDGEMENT

Temperature : 15 ~ 35℃

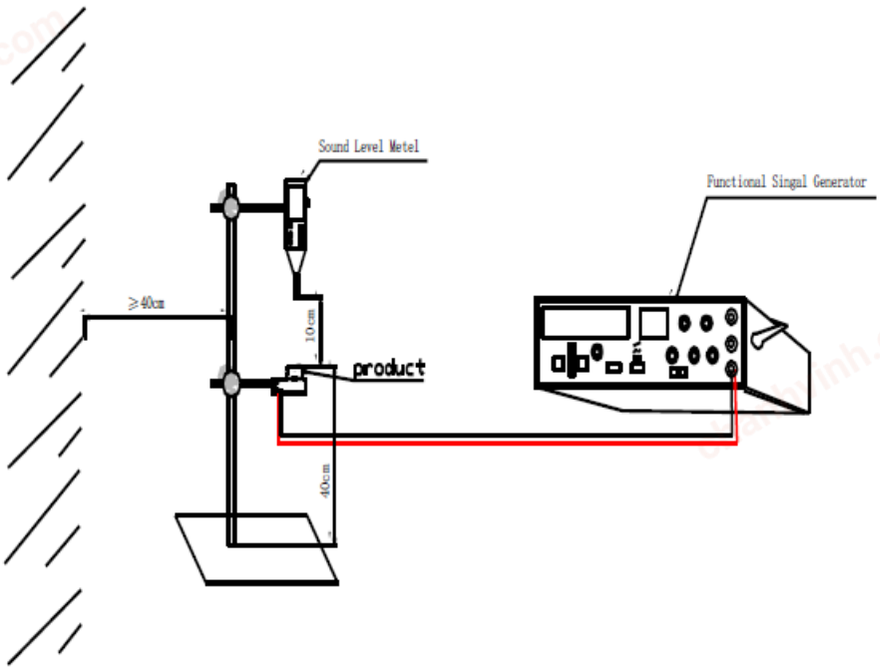
Relative humidity : 45% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

3-2 . Standard Test Fixture

3-2-1.rated Voltage(Square wave):12V

3-2-2.Resonant Frequency:1200Hz

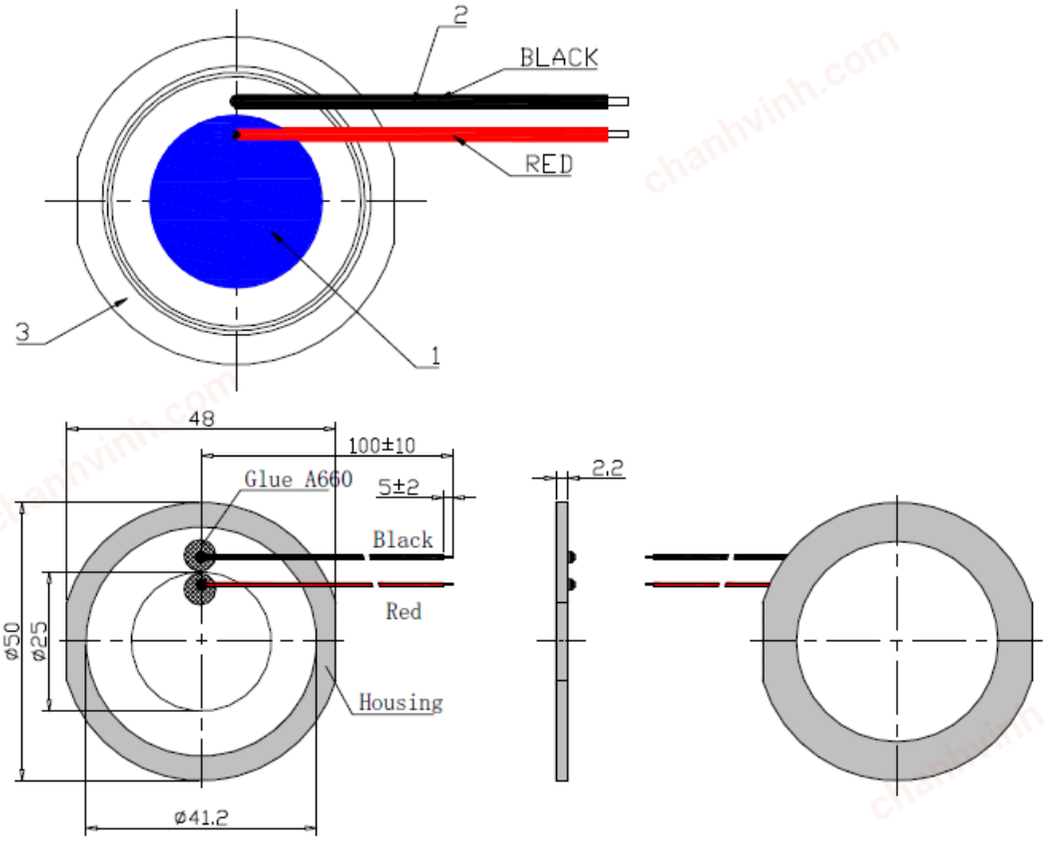


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4.DIMENSIONS

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



1）All parts must be meet to ROHS.

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3	Housing	1	Black ABS	
2	Lead wire	2	Black&Red (UL1571 30AWG)	
1	Piezo element	1	Brass	
Part No.	Part Name	Q'TY	Material	Remark