
SPECIFICATION FOR APPROVAL

| | |
|-------------------|------------------|
| Product | SMD PIEZO BUZZER |
| Part No. | APD-1709 |
| Customer Approval | |

| Approved By | Checked By | Made By |
|-------------|------------|---------|
| | | |



A & B Components

<http://www.speaker-tw.com>

1. Specifications

APD-1709

| Items | | Units | Specifications | Conditions |
|-------|--------------------|----------|----------------|---------------------------|
| 01 | Rated Voltage | Vp-p | 9 | (square wave) |
| 02 | Operating Voltage | Vp-p | 6~18 | |
| 03 | Rated Current | mA(Max) | 5 | |
| 04 | Sound Output | dBA(Min) | 85 | At 9Vp-p , 3.2K Hz / 10cm |
| 05 | Resonant Frequency | Hz | 3200 | |
| 06 | Capacitance | pF | 15000±30% | At 120Hz |
| 07 | Operating Temp. | °C | -30 ~ +75 | |
| 08 | Storage Temp. | °C | -40 ~ +85 | |
| 09 | Weight | g | 0.5 | |

2. Measuring Method

2-1. Test Condition

STANDARD

Temperature : 15 ~ 35°C

Relative humidity : 25% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

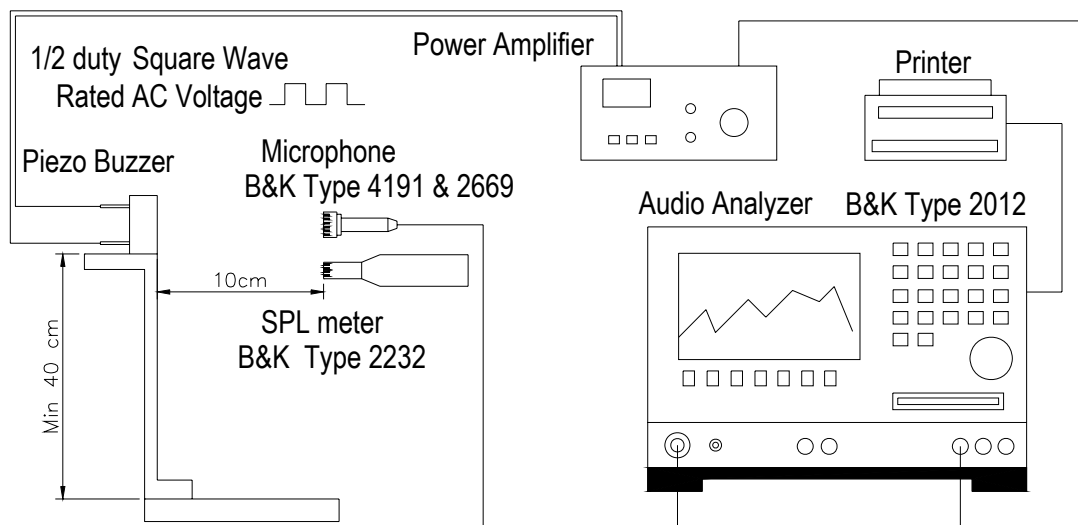
BASIC

Temperature : 20±3°C

Relative humidity : 60% ~ 70%,

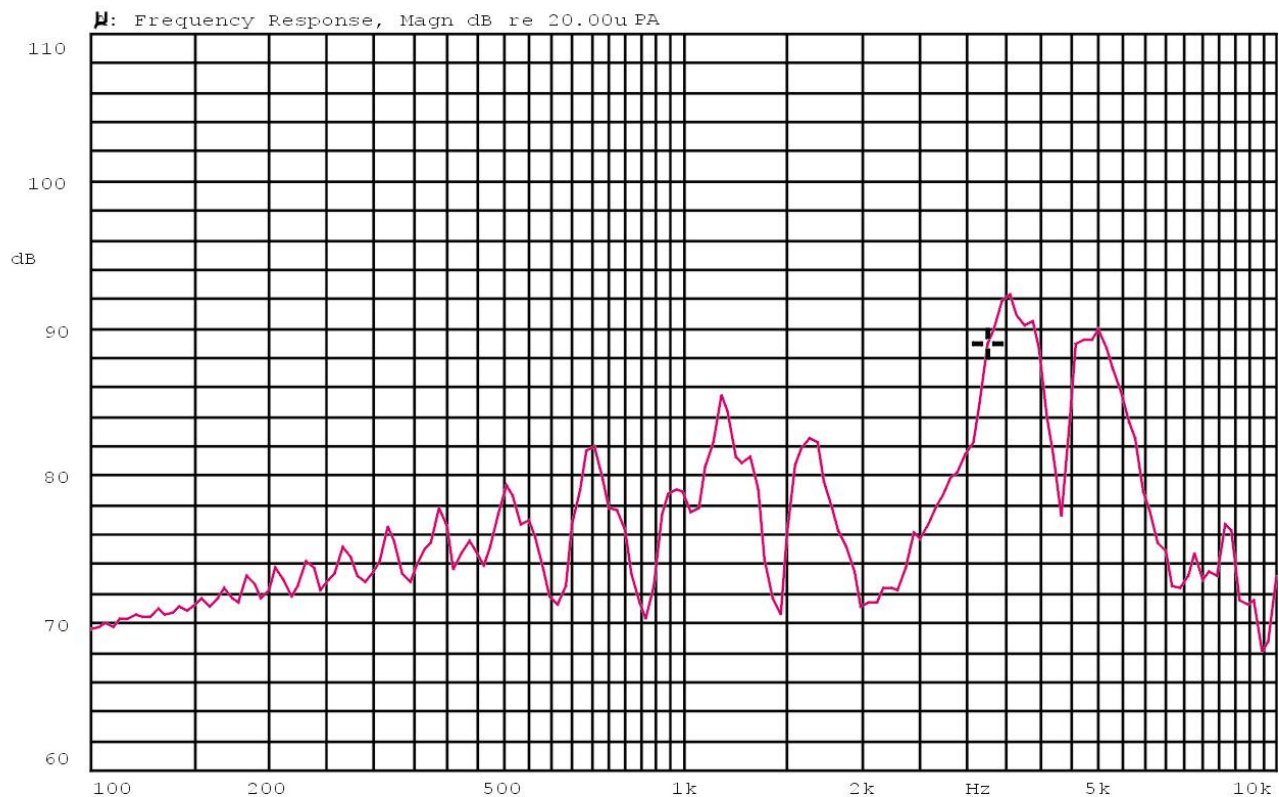
Atmospheric pressure : 860mbar to 1060mbar

2-2. Standard Test Fixture



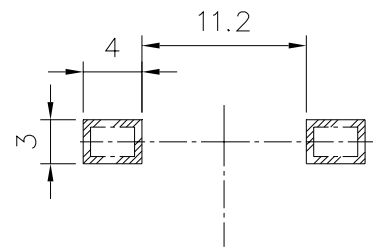
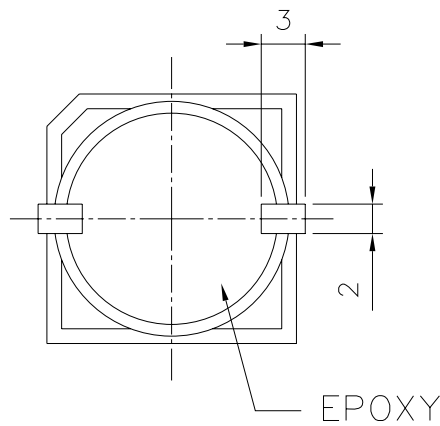
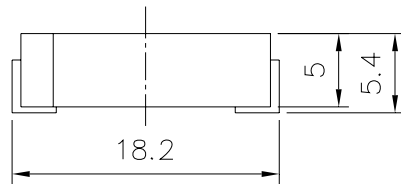
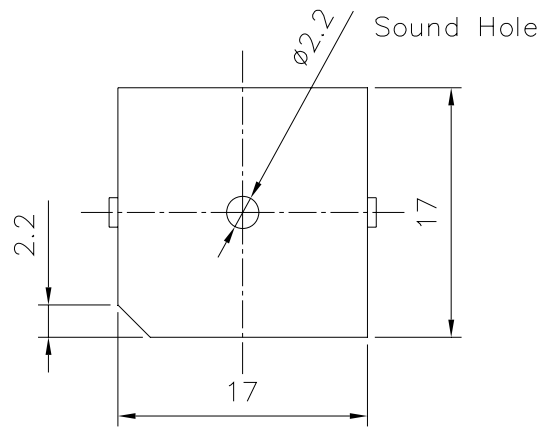
2-3. Frequency Response Curve

X: 3.2546kHz Y: 89.03dB ZA: Live Curve SSR T. RMS



Mode: SSR





| | | | | |
|-------------------------|--|---------------------------|-------------------------------|---------------|
| TITLE: SMD PIEZO BUZZER | | DRAWN: Richard 01/18/2007 | SCALE: 2:1 | SHEET: 1 of 1 |
| PART NO. APD-1709 | | DESIGNED: R&D DEP. | UNITS: mm | |
| DWG NO. DTS-1401 | | CHECKED: | TOLERANCE ± 0.2 | |
| | | APPROVAL: | UNLESS OTHERWISE SPECIFIED: | |
| REV 1 | | MATERIAL: LCP | ONE PLACE DECIMAL \pm *** | |
| | | | TWO PLACE DECIMAL \pm *** | |
| | | | THREE PLACE DECIMAL \pm *** | |

A & B Components

4. Reliability Test

| Item | Conditions | Evaluation standard |
|--------------------------------|--|---|
| 01 Low Temp. Storage Test | $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$,240Hr | After the test the part shall meet specifications without Any degradation and performance except S.P.L S.P.L shall be 73dB or more. |
| 02 High Temp.Storage Test | $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$,240Hr | |
| 03 Temp./Humidity Storage Test | $40^{\circ}\text{C} \pm 2^{\circ}\text{C}$, RH90-95% 240Hr | |
| 04 Thermal Shock Test | $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (0.5Hr) \rightarrow , $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (0.25Hr) $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (0.5Hr) \rightarrow , $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (0.5Hr) 5 cycles | |
| 05 Vibration Test | 10-55Hz/2 Hr amplitude1.5mm X,Y, Z,3 directions | |
| 06 Mechanical Shock Test | +100G,Half Sine wave, XYZ , 3 impacts per axis ,3 times. | |
| 07 Free Drop Test | The part shall be dropped freely from a height of 75 cm X,Y, Z,3 directions 3times (total 9 times) | |
| 08 Life Burning Test | The part shall be subjected to 500 hrs in the room temp with rated voltage applied | |
| 09 Lead Strength Test | Pull Lead with a force of 10N,on the direction of the lead axis for 10 ± 1 sec. | |

5.Solder ability

Temperature profile for reflowable Buzzer .

