# SPECIFICATION FOR APPROVAL

| Product  | PIEZO BUZZER (SELF DRIVE) |  |  |
|----------|---------------------------|--|--|
| Part No. | AZ-2431S-W                |  |  |
| Customer |                           |  |  |
| Approval |                           |  |  |

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



A & B Components

http://www.speaker-tw.com

#### 1. Specifications

| Items |                      | Units       | Specifications | Conditions |
|-------|----------------------|-------------|----------------|------------|
| 01    | Rated Voltage        | VDC         | 12             |            |
| 02    | Operating Voltage    | VDC         | 3~20           |            |
| 03    | Rated Current        | mA(Max)     | 14             | At 12VDC   |
| 04    | Sound Output At 30cm | dBA(Min)    | 73             | At 12VDC   |
| 05    | Resonant Frequency   | Hz          | 3100±500       |            |
| 06    | Tone Nature          | CONTINUEOUS |                |            |
| 07    | Operating Temp.      | °C          | -20 ~ +60      |            |
| 08    | Storage Temp.        | °C          | -20 ~ +70      |            |
| 09    | Weight               | g           | 4.5            |            |

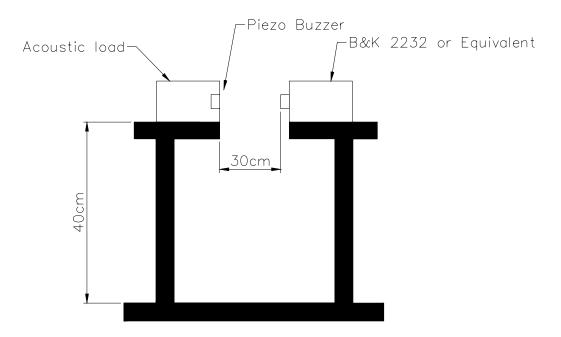
### 2. Measuring Method

#### 2-1. Test Condition

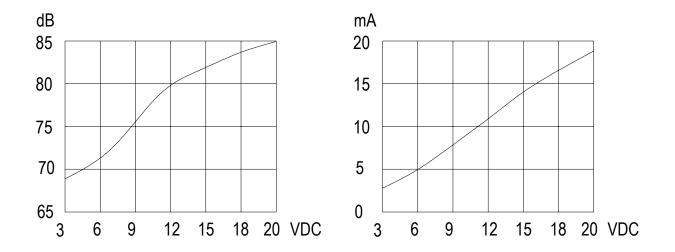
STANDARD Temperature :  $15 \sim 35^{\circ}$ C Relative humidity :  $25\% \sim 85\%$ , Atmospheric pressure : 860mbar to 1060mbar.

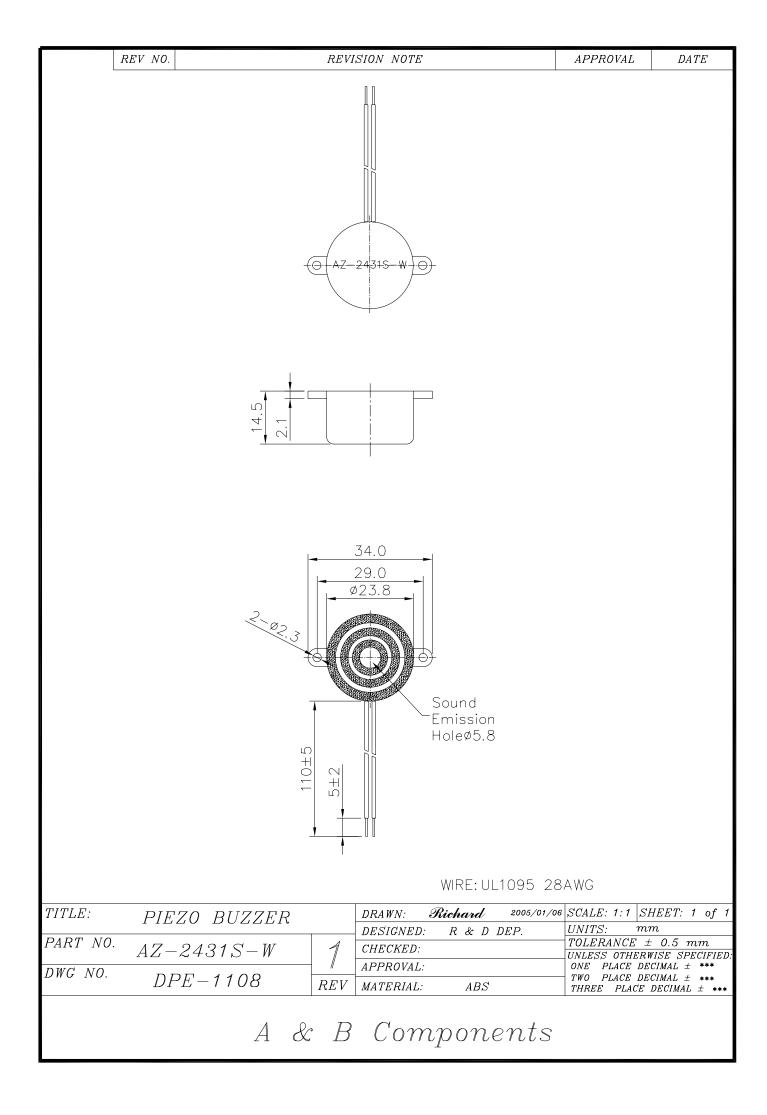
JUDGEMENT Temperature : 20±3°C Relative humidity : 60% ~ 70%, Atmospheric pressure : 860mbar to 1060mbar

#### 2-2. Standard Test Fixture



#### 2-3. Characteristic Curve





## 4. Reliability Test

|    | Item                        | Conditions   | Evaluation standard                                 |  |
|----|-----------------------------|--|---|--|
| 01 | Low Temp. Storage Test      | -40°C ±2°C ,240Hr  |   |  |
| 02 | High Temp.Storage Test      | 85°C ±2°C ,240Hr   |   |  |
| 03 | Temp./Humidity Storage Test | 40°C ±2°C,RH90-95%<br>240Hr  |   |  |
| 04 | Thermal Shock Test          | 5  | After the test the part shal<br>meet specifications |  |
| 05 | Vibration Test              | amplitude1.5mm   | more.<br>m a  |  |
| 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 3 times (total 9 times ) |   |  |
| 08 | Life Burning Test           | e 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 $10\pm1$ sec.                   |   |  |