# SPECIFICATION FOR APPROVAL

| Product  | MAGNETIC BUZZER (SMD) |  |
|----------|-----------------------|--|
| Part No. | AD-9004-AW            |  |
| Customer |                       |  |
| Approval |                       |  |

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



A & B Components

http://www.speaker-tw.com

#### **FEATURES**

Applications : Mobile phone , PDA , pager etc.

|    | Items                | Units                  | Specifications | Conditions                                |
|----|----------------------|------------------------|----------------|---|
| 01 | Rated Voltage        | Vo-p                   | 3.6            | Vo-p                                      |
| 02 | Operating Voltage    | Vo-p                   | 2.5 ~ 4.5      | 0V  |
| 03 | Consumption Current  | mA                     | Mean 100       |   |
| US |                      | (max)                  | Peak 300       | Standard State, Standard Drive Circuit.   |
| 04 | Sound Pressure Label | dB                     | 85             | Rated Voltage, Distance at 10 cm free air |
|    |                      | (min)                  | 00             | 2600Hz, Square Wave 1 / 2 Duty            |
| 05 | Resonant Frequency   | Hz                     | 2670           |   |
| 06 | Coil Resistance      | Ω                      | 16 ± 3         | At Basic State                            |
| 07 | Operating Temp.      | $^{\circ}\!\mathbb{C}$ | -20 ~ +60      |   |
| 80 | Storage Temp.        | $^{\circ}\!\mathbb{C}$ | -30 ~ +70      |   |
| 09 | Weight               | Gram                   | 0.8            |   |

### **Test Condition**

**STANDARD** 

Temperature : 15 ~  $35^{\circ}$ C

Relative humidity: 25% ~ 85%,

Atmospheric pressure: 860mbar to 1060mbar.

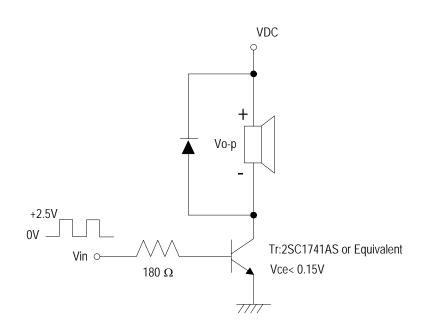
**JUDGEMENT** 

Temperature : 20±3°C

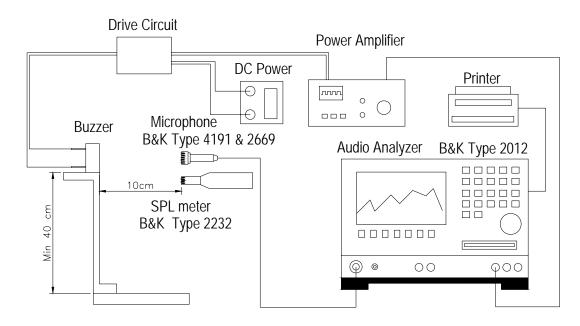
Relative humidity: 60% ~ 70%,

Atmospheric pressure: 860mbar to 1060mbar

#### **Standard Drive Circuit**

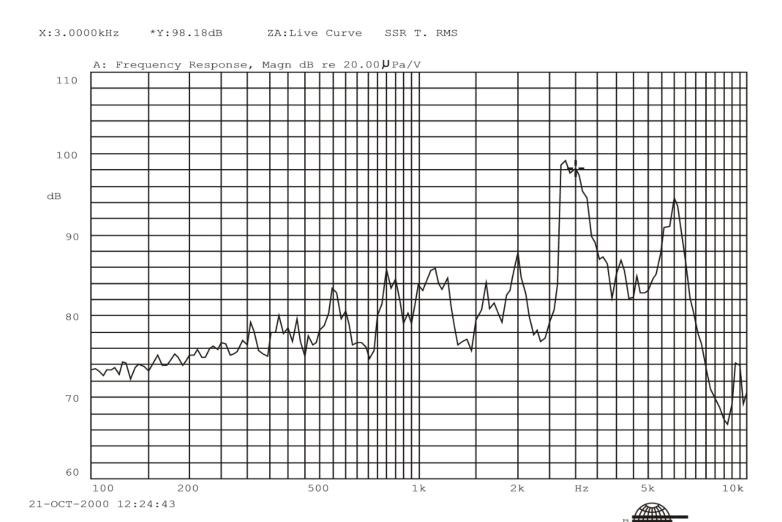


#### **Standard Test Fixture**

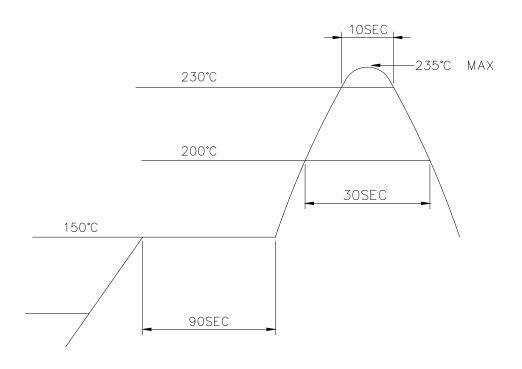


### Frequency Response Curve

Mode: SSR

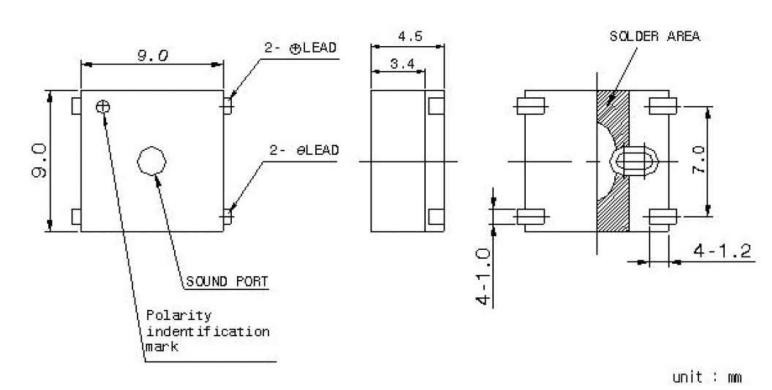


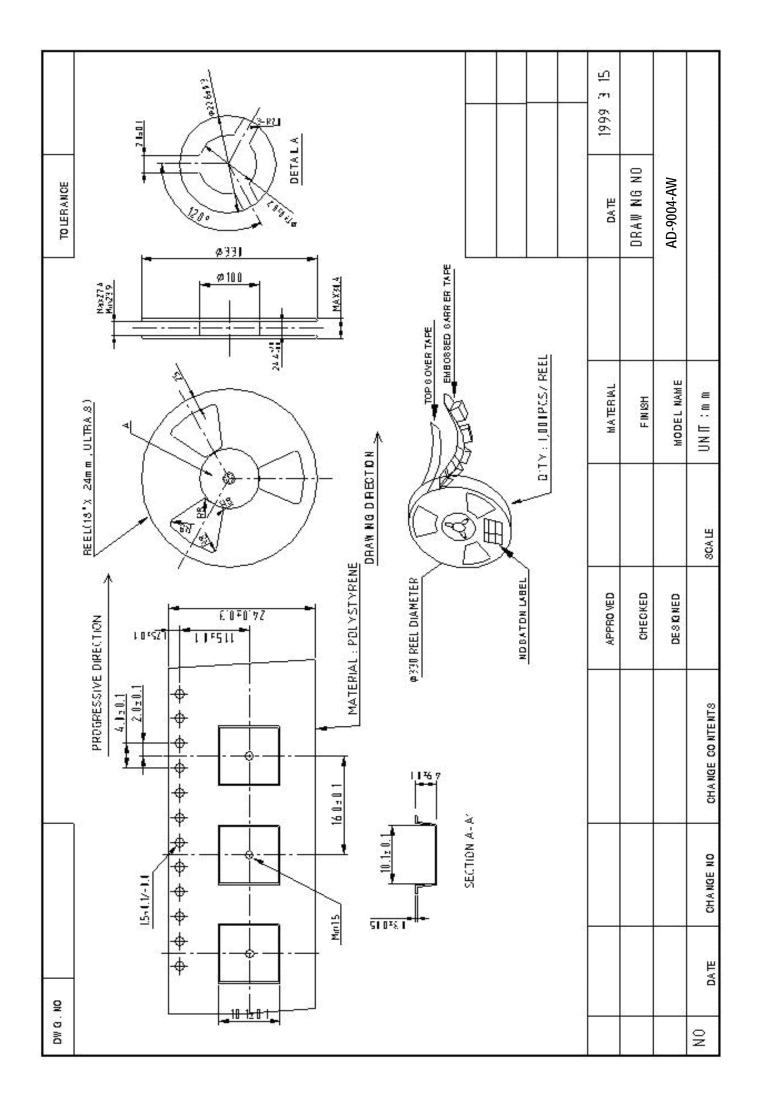
# **SOLDERING PROFILE**



- 1.TERMINAL SOLDERING TEMPERATURE
- MAX :235 ℃
- 2.SOLDERING TIME MAX:2.5SEC
- 3.TR REFLOW OVEN TEMPERATURE PROFILE

### ■ DIMENSIONS





# **RELIABILITY TEST**

| Item |                        | Test conditions   | Evaluation standard  |
|------|------------------------|---|--|
| 1    | High temp storage life | The part shall be capable of withstanding the storage temperature of +95°C for 240 hours.   |  |
| 2    | Low temp storage life  | The part shall be capable of withstanding the storage temperature of -50°C for 240 hours.   |  |
| 3    | Temp. cycle            | The part shall be subjected to 5 cycles one cycle shall consist of  + 85° C  - 40° C  30min  60min  |  |
| 4    | Temp./ Humidity cycle  | 60° C<br>25° C<br>10° C   | After the test, the part shall meet specifications without any degradation in appearance and performance except SPL. SPL shall be 78 or more |
| 5    | Operating life         | Driving the sounder at 25±10°C for 240hrs. Input Rated Voltage and Frequency.   |  |
| 6    | High temp.             | The part shall be subjected to 240 hours at +85°C Input Rated Voltage and Frequency.  |  |
| 7    | Low temp.              | The part shall be subjected to 240 hours at -40°C Input Rated Voltage and Frequency.  |  |
| 8    | Vibration              | 10~55Hz 1.5mm 55~150Hz 5G 10~200~10Hz 15minutes X,Y,Z,3directions 2h/direction.   |  |
| 9    | Fixed drop             | The part mounted on an exclusive fixture(115g) shall be dropped 5 times from a height of 152cm onto concrete in each of 6 different axes(total 6 times) |  |
| 10   | Free drop              | The part shall be dropped freely from a height of 100cm onto concrete 1 time in 6 axes.(total 6 time)   |  |
| 11   | Solder ability         | lacaanda  | Ninety-five percent(95%) coverage with a continuous coating of bright new solder   |
| 12   | Strength of Terminal   | It shall be more than 10N in the vertical direction of terminal in the state that 4 terminals are soldered on PCB                                       | Same as items of No. 1 to No. 10   |