

MESSRS.

SPECIFICATION FOR APPROVAL

承 認 書

| | |
|--------------------------|-------------------------------------|
| Product | MAGNETIC BUZZER (SELF-DRIVE) |
| Part No. | AX-1209-P3 (RoHS) |
| Customer Approval | |

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



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ADVANCED ACOUSTIC TECHNOLOGY CORP.

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File Name:

1. Specifications

AX-1209-P3(RoHS)

| Items | Units | Specifications | Conditions | |
|-------|---------------------------|----------------|------------|-----------------------------------------|
| 01 | Rated Voltage | VDC | 9 | Response Time 500 mSec |
| 02 | Operating Voltage | VDC | 6 ~ 12 | Volts D.C |
| 03 | Consumption Current | mA (Max) | Mean 35 | Applying rated voltage |
| | | | Peak 105 | |
| 04 | Direct Current Resistance | Ohm | None | |
| 05 | Sound Output | dBA (min) | 88 | Distance at 10cm,applying rated voltage |
| 06 | Basic Frequency | Hz | 2400± 300 | |
| 07 | Operating Temp. | °C | -20 ~ +70 | |
| 08 | Storage Temp. | °C | -30 ~ +80 | |
| 09 | Weight | Gram | 2 | |

2. Measuring Method

2-1. Test Condition

STANDARD

Temperature : 15 ~ 35°C

Relative humidity : 25% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

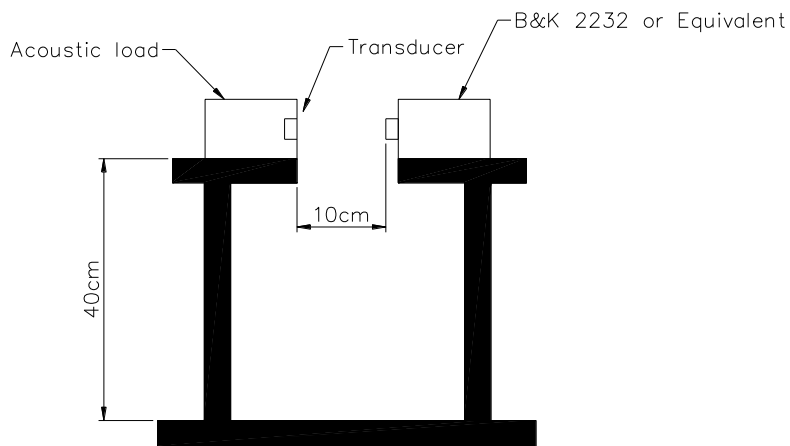
JUDGEMENT

Temperature : 20±3°C

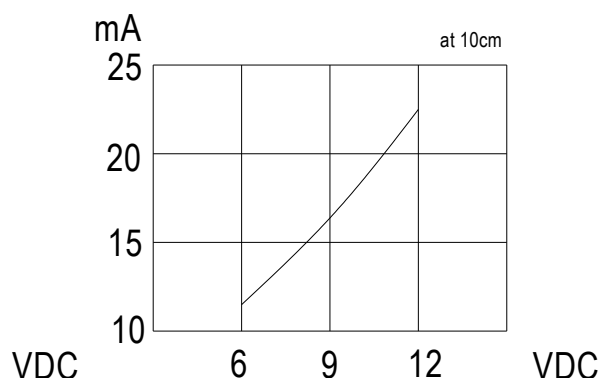
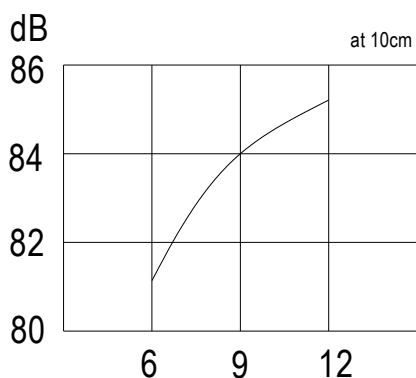
Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

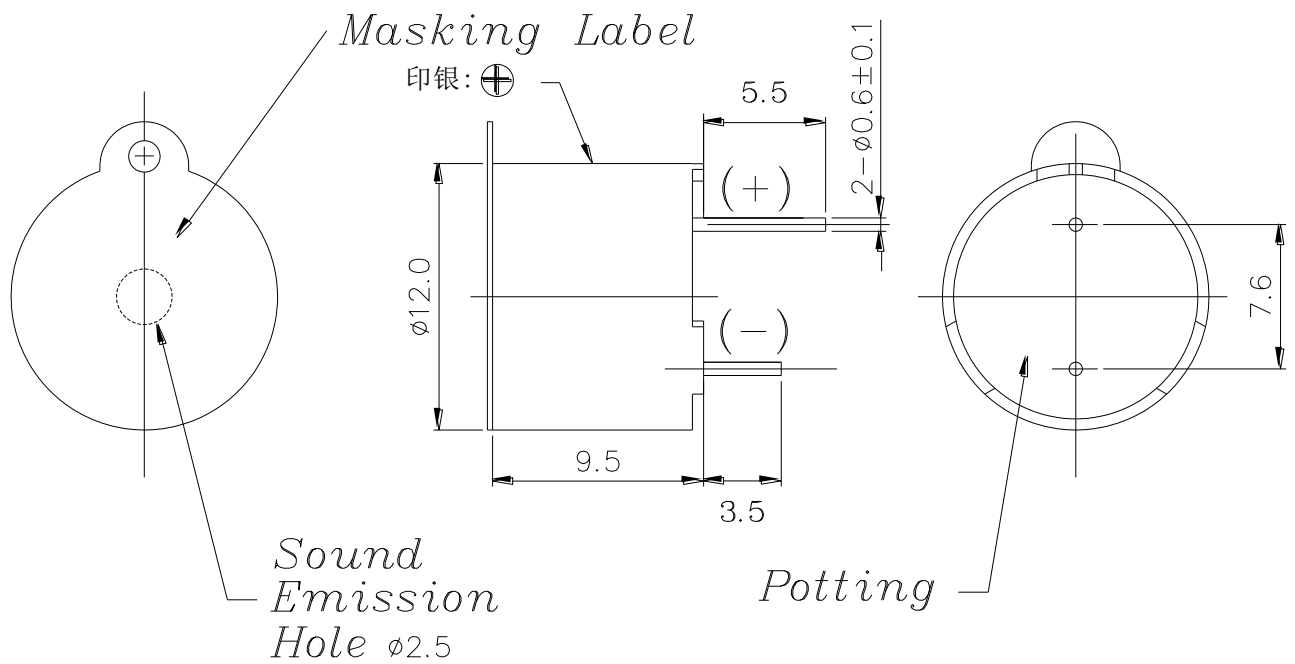
2-3. Standard Test Fixture



2-4. Frequency Response Curve



| | | | |
|---------|---------------|----------|------|
| REV NO. | REVISION NOTE | APPROVAL | DATE |
|---------|---------------|----------|------|



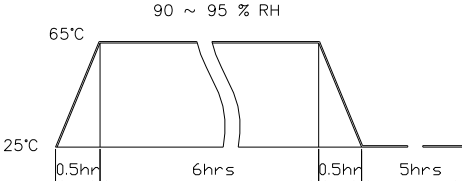
WAVE SOLDER AND WASH ALLOWED

| | | | | | |
|------------------------------------|--|----------------------|-------------------------------|------------|---------------|
| TITLE: SOUND TRANSDUCER DIMENSIONS | | DRAWN: Lily | 2007/08/27 | SCALE: 3/1 | SHEET: 1 OF 1 |
| PART NO. AX-1209-P3 | | DESIGNED: R&D OF AAT | UNITS: mm | | |
| DWG NO. DTE-1034 | | CHECKED: | TOLERANCE ± 0.5 | | |
| | | APPROVAL: | UNLESS OTHERWISE SPECIFIED: | | |
| REV 1 | | MATERIAL: PPO | ONE PLACE DECIMAL \pm *** | | |
| | | | TWO PLACE DECIMAL \pm *** | | |
| | | | THREE PLACE DECIMAL \pm *** | | |



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4.RELIABILITY TEST

| Item | Test conditions | Evaluation standard | | | | | | |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|-------|-------|-------|--|
| 01 High temp.Storage life | The part shall be capable of withstanding a storage Temperature of 95°C for 96 hours. | After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L S.P.L shall be 74dB or more. | | | | | | |
| 02 Low temp.Storage life | The part shall be capable of withstanding a storage Temperature of -50°C for 96 hours. | | | | | | | |
| 03 Temp. cycle | The part shall be subjected 10 cycles. One cycle shall consist of; <div style="text-align: center; border: 1px solid black; width: fit-content; margin: 10px auto;"> <table style="border-collapse: collapse;"> <tr> <td style="padding: 5px;">-40°C</td> <td style="padding: 5px;">85°C</td> </tr> <tr> <td style="padding: 5px;">30min</td> <td style="padding: 5px;">30min</td> </tr> <tr> <td colspan="2" style="padding: 5px; text-align: center;">60min</td> </tr> </table> </div> | | -40°C | 85°C | 30min | 30min | 60min | |
| -40°C | 85°C | | | | | | | |
| 30min | 30min | | | | | | | |
| 60min | | | | | | | | |
| 04 Temp./Humidity cycle | The part shall be subjected 10 cycles. One cycle shall be 12 hours and consist of; <div style="text-align: center; margin: 10px auto;">  </div> | | | | | | | |
| 05 Operating life | Rated Voltage applied. 1. Ordinary temperature The part shall be subjected to 1000 hours at room temperature (25 ±10°C) 1. High temperature The part shall be subjected to 500 hours at 85°C 2. Low temperature The part shall be subjected to 500 hours at -40°C | | | | | | | |
| 06 Lead Strength | Pull load on the direction of the lead axis for 10 ±1 sec. | | | | | | | |
| 07 Vibration | The part shall be subjected to a vibration cycle of 10Hz to 55Hz to 10Hz in a period of 1 minute. Total peak amplitude shall be 1.52mm (9.3G). The vibration test shall consist of 2 hours per plane in each three mutually perpendicular planes for a total time of 6 hours. | | | | | | | |

| Item | | Test conditions | Evaluation standard |
|------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 08 | Fixed drop | The part shall be mounted on standard pc board and dropped from a height of 152cm onto a concrete floor 5 times in each 6 planes.(a total of 30 times) | After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L S.P.L shall be 74dB or more. |
| 09 | Free drop | The part only shall be dropped from a height of 75cm onto a 40mm thick wooden board 3 times in 3 axes (X.Y.Z). (a total of 9 times). | |
| 10 | Solder heat resistance | Soldering into solderbath : $350\pm 5^{\circ}\text{C}$ Soaking time : 3.5 ± 0.5 sec | |
| 11 | Solder ability | Soldering : $250\pm 5^{\circ}\text{C}$ / 5 Sec. $350\pm 5^{\circ}\text{C}$ / 1.5 Sec Soldering t into solderbath : $250\pm 5^{\circ}\text{C}$ Soaking time : 2 ± 0.5 sec. | |
| 12 | Lead strength | Pull lead with a force of 10N,on the direction of the lead axis for 10 : 10 ± 1 sec | |
| 13 | Washability | Solvent : deionized water Solvent temp. : $55\pm 5^{\circ}\text{C}$ Soaking time : 5 ± 0.5 min. | |