

# ***MESSRS.***

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## **SPECIFICATION FOR APPROVAL**

### **承 認 書**

<b>Product</b>	<b>MAGNETIC BUZZER INDICATOR</b>
<b>Part No.</b>	<b>AX-1212-LF (RoHS)</b>
<b>Customer Approval</b>	

<b>Approved By</b>	<b>Checked By</b>	<b>Made By</b>
工程 部 王台平 OCT-25-2005	工程 部 劉民祥 OCT-25-2005	工程 部 許俊程 OCT-25-2005



**ADVANCED ACOUSTIC TECHNOLOGY CORP.**

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# 1. Specifications

AX-1212-LF

Items	Units	Specifications	Conditions	
01	Rated Voltage	VDC	12	Response Time 0.5 Sec
02	Operating Voltage	VDC	8 ~ 16	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)	85	Distance at 10cm, applying rated voltage
06	Basic Frequency	Hz	2300± 300	
07	Operating Temp.	°C	-30 ~ +75	
08	Storage Temp.	°C	-40 ~ +85	
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.

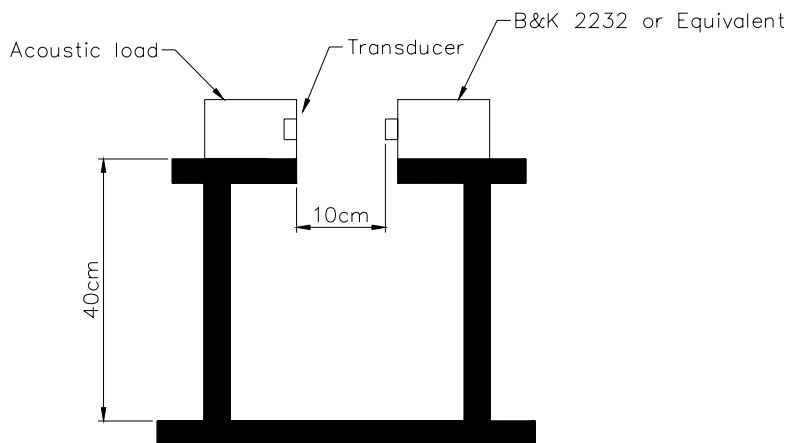
JUDGEMENT

Temperature : 20±3°C

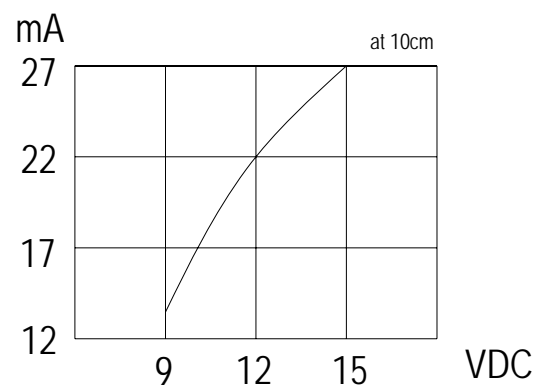
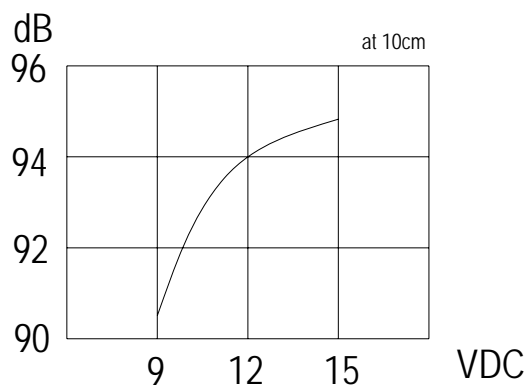
Relative humidity : 60% ~ 70%,

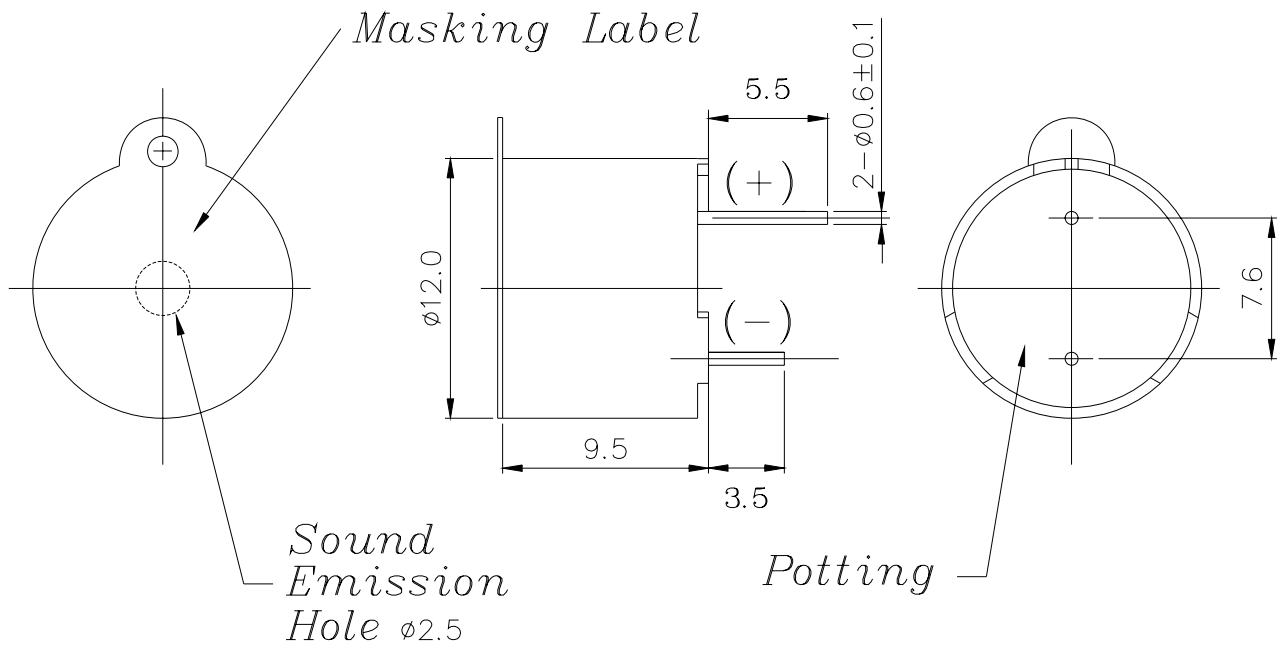
Atmospheric pressure : 860mbar to 1060mbar

### 2-3. Standard Test Fixture



### 2-4. Frequency Response Curve



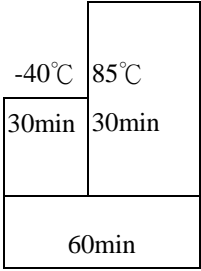
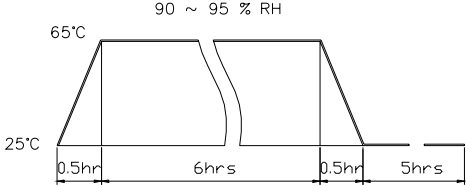


TITLE: SOUND TRANSDUCER DIMENSIONS		DRAWN: <i>Dak</i> 02/01/2000	SCALE: 3/1	SHEET: 1 OF 1
PART NO. AX-1212-LF	1 REV	DESIGNED: R&D OF AAT	UNITS: mm	
DWG NO. DTE-1116		CHECKED:	TOLERANCE $\pm 0.5$	
		APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL $\pm$ *** TWO PLACE DECIMAL $\pm$ *** THREE PLACE DECIMAL $\pm$ ***	
		MATERIAL: PPO		



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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 85°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 -40°C for 96 hours.	
03 Temp. cycle	The part shall be subjected 10 cycles. One cycle shall consist of; <div style="text-align: center; margin: 10px 0;">  <p>The diagram shows a rectangular cycle. The top-left corner is labeled -40°C and the top-right corner is labeled 85°C. The left vertical segment is labeled 30min, the right vertical segment is labeled 30min, and the bottom horizontal segment is labeled 60min.</p> </div>	
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 0;">  <p>The diagram shows a trapezoidal cycle. The left vertical segment is labeled 0.5hr, the top horizontal segment is labeled 6hrs, and the right vertical segment is labeled 0.5hr. The bottom horizontal segment is labeled 5hrs. The top-left corner is labeled 65°C and the bottom-left corner is labeled 25°C. Above the top horizontal segment, it says 90 ~ 95 % RH.</p> </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 75°C 2. Low temperature The part shall be subjected to 500 hours at -30°C	
06 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
07	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)	<p>After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L</p> <p>S.P.L shall be 74dB or more.</p>
08	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).	
09	Solder heat resistance	Soldering into solderbath : $350\pm 5^{\circ}\text{C}$ Soaking time : $3.5\pm 0.5$ sec	
10	Solder ability	Soldering : $255\pm 5^{\circ}\text{C}$ / 5 Sec. $355\pm 5^{\circ}\text{C}$ / 1.5 Sec. Soldering t into solderbath : $255\pm 5^{\circ}\text{C}$ / 2sec.	
11	Lead strength	Pull lead with a force of 10N,on the direction of the lead axis for 10 : $10\pm 1$ sec	
12	Washability	Solvent : deionized water Solvent temp. : $55\pm 5^{\circ}\text{C}$ Soaking time : $5\pm 0.5$ min.	