

# *MESSRS.*

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## SPECIFICATION FOR APPROVAL

## 承 認 書

Product	DYNAMIC RECEIVER
Part No.	AR-4032JA-1-LF (RoHS)
Customer Approval	

Approved By	Checked By	Made By
工程 部 王台平 NOV-16-2006	工程 部 劉民祥 NOV-16-2006	工程 部 許俊程 NOV-16-2006



**ADVANCED ACOUSTIC TECHNOLOGY CORP.**

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# 1. SPECIFICATION

AR-4032JA-1-LF

ITEMS.		SPECIFICATIONS
01	Type	Dynamic 30mm receiver unit
02	Sensitivity (S.P.L)	116dB $\pm$ 3 dB at 1kHz 180mV with IEC 318 coupler
03	Impedance.	32 Ohm $\pm$ 15% at 1KHz
04	Nominal Input Power	20 mW
05	Max. Input Power.	30 mW
06	Frequency Range	100 – 10K Hz
07	Total Harmonics Distortion	Max 5 % at 1K Hz,1mW.
08	Operation temperature	-20 $^{\circ}$ C to +60 $^{\circ}$ C
09	Storage temperature	-30 $^{\circ}$ C to +70 $^{\circ}$ C
10	Weight.	16.5g $\pm$ 0.5g

## 2. MEASURING METHOD

### 2-1. Test Condition

#### STANDARD

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

Relative humidity : 45% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

#### JUDGEMENT

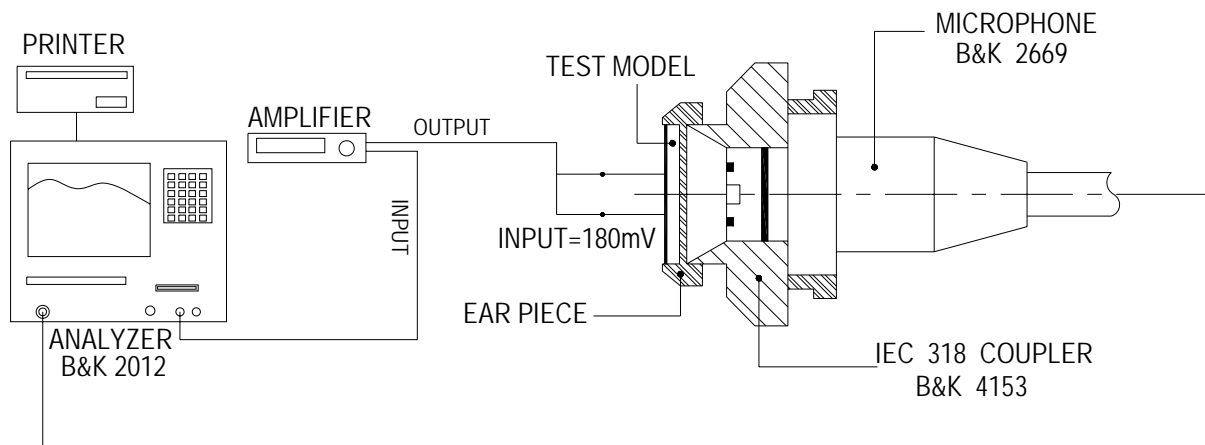
Temperature : 20 $\pm$ 3 $^{\circ}$ C

Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

## 2-2. Standard Test Fixture

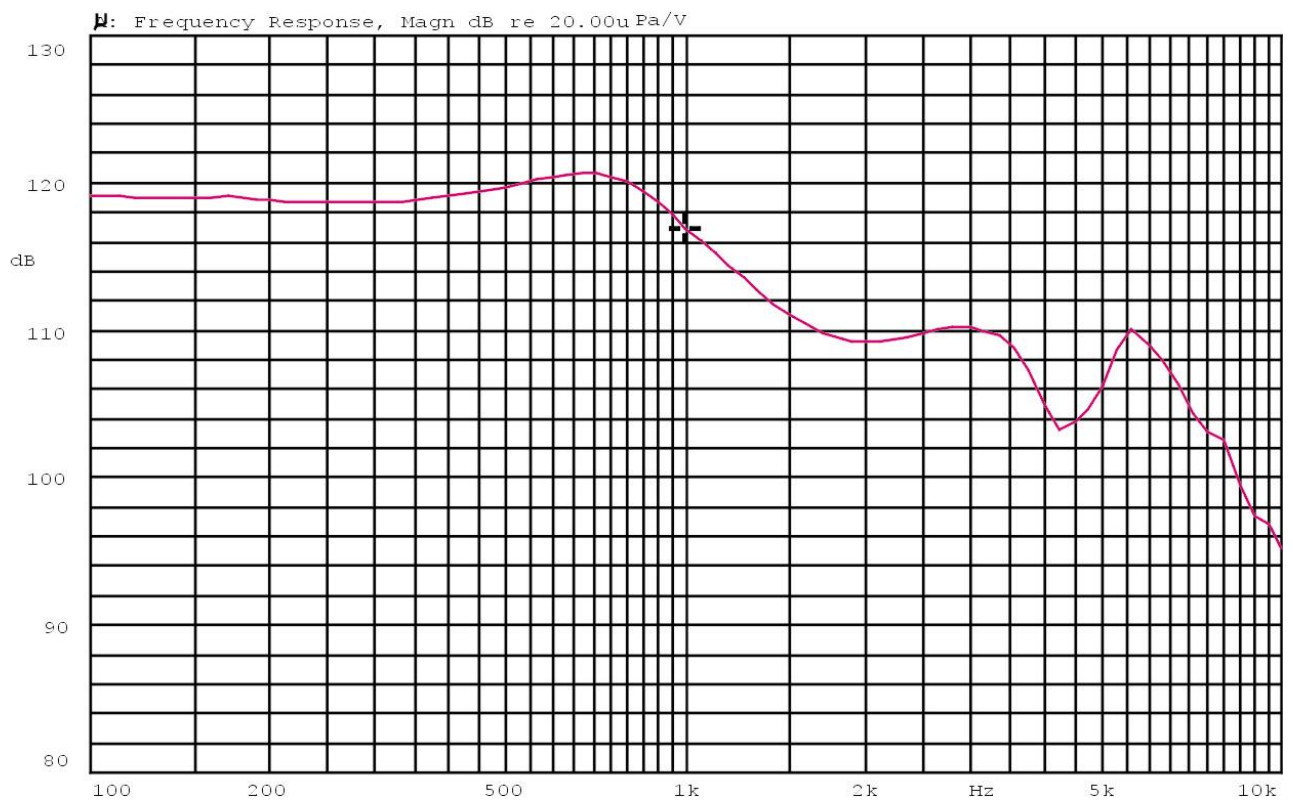
Input signal : 1mW( 180mV)



## 2.3 2Frequency Response Curve

AR-4032JA-1

X: 1.0000kHz \*Y: 116.97dB ZA: Live Curve SSR Fund.



Mode: Receiver

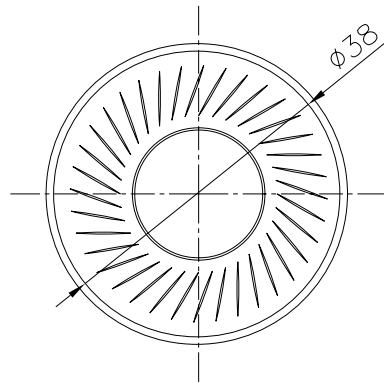
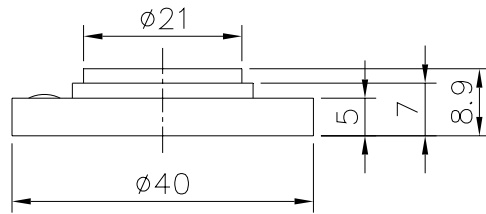
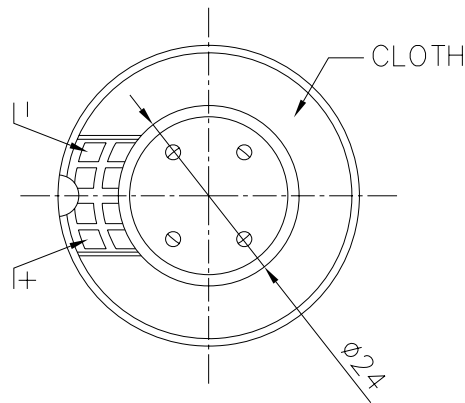


REV NO.

REVISION NOTE

APPROVAL

DATE



DIAPHRAGM : LIMPID MYLAR

TITLE: RECEIVER		DRAWN: JOYEN 11/16/2006	SCALE: 1:1	SHEET: 1 of 1
PART NO. AR-4032JA-1-LF	1	DESIGNED: R&D OF AAT	UNITS: mm	
DWG NO. DTS-1223		CHECKED:	TOLERANCE $\pm 0.2$	
	REV	APPROVAL:	UNLESS OTHERWISE SPECIFIED:	
		MATERIAL: *****	ONE PLACE DECIMAL $\pm$ ***	
			TWO PLACE DECIMAL $\pm$ ***	
			THREE PLACE DECIMAL $\pm$ ***	



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## 4. RELIABILITY TESTS

ITEMS.		SPECIFICATIONS
01	High temp. Test	Keep 96 hours at $+70^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
02	Low temp. Test	Keep 96 hours at $-30^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
03	Humidity test	Keep 96 hours at $+40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ relative humidity 90% and leave 3 hours in normal temperature and then checked.
04	Temp./humidity cycle	<p>The part shall be subjected 5 cycles. One cycle shall be 12 hours and consist of;</p> <p style="text-align: center;"> <math>65^{\circ}\text{C}</math>  <math>90 \sim 95 \% \text{ RH}</math>  <math>25^{\circ}\text{C}</math>  <math>0.5\text{hr}</math>   <math>6\text{hrs}</math>   <math>0.5\text{hr}</math>   <math>5\text{hrs}</math> </p>
05	Thermal Cycle Test.	Low temperature: $-30^{\circ}\text{C} \pm 3^{\circ}\text{C}$ , temperature: $+70^{\circ}\text{C} \pm 3^{\circ}\text{C}$ , cycle: 1 hour/cycle each, and then keep 5 cycles in a room.
06	Vibration	10~200~10Hz Sin-Wave Sweep 15min. 5G(Constant) X,Y, Z 3 direction. 2 hours each, total 6 hours.
07	Fix Drop test	Fix on Jig. then drop from 152cm height to the concrete floor X,Y, Z 6 direction. 5 times each, total 30 times.
08	Free Drop test	Free drop from 100cm height to the concrete floor X,y, z 6 direction. 1 times each, total 6 times.
09	Load test	Rated power white noise is applied for 96 hours
10	Max Power test	Max Power 1 minute on – 2 minute off 10 cycles.
<p>Criterion :</p> <p>After these test , the change of S.P.L shall be within <math>\pm 3 \text{ dB}</math>.</p>		

## SOLDERING CONDITION

Recommend using constant branding iron in **30W**, and in temperature range  **$350 \pm 10^{\circ}\text{C}$**   
 Soldering time 2 seconds.