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# SPECIFICATION FOR APPROVAL

Product	DYNAMIC SPEAKER
Part No.	AS-3246B08-B2T
Customer Approval	

Approved By	Checked By	Made By



A & B Components

<http://www.speaker-tw.com>

# 1.SPECIFICATION

AS-3246B08-B2T

ITEM		SPECIFICATIONS	
01	Type	Dynamic speaker	
02	Dimension	External diameter 32 mm	
03	Rated Input Power	2.0W	
04	Max. Input Powe	2.5W	
05	Impedance	8 ohm ± 15% at 2000Hz.	
06	Resonance Frequency (Fo)	520Hz ± 20% at   Fo, 1V	
07	Sensitivity (S.P.L.)	87dB(0.1W/0.1m) ± 3 dB	at AVE0.8K 1.0K 1.2K 1.5K Hz.
		100dB (2.0W / 0.1m) ± 3 dB	
08	Frequency Range	Fo – 20KHz	
09	Total Harmonics Distortion	Max 8 % at 1 KHz,2.0W.	
10	Voice Coil	Diameter 13.4 mm	
11	Magnet	Rare earth permanent (Nd-Fe-B) magnet Φ12.5 x 1.5 mm	
12	Weight	8g ± 5%g	
13	Appearance	Should not exist any obstacle to be harmful to normal operation, damages, cracks, rusts and distortions, etc.	
14	Operation Test	Must be normal at program source – 2.0W	
15	Buzz, Rattle, etc.	Should not be audible at 4.0V sine Wave between Fo to 20KHz	
16	Polarity	When positive voltage is applied to the terminal marked (+), diaphragm should move to the front.	
17	Terminal Strength	Capable of withstand 1kg load for 30 seconds without resulting in any damage or rejection.	
18	Temperature	Operating temperature: -20℃ to +60℃	
		Storage    temperature: -30℃ to +70℃	

# 1. MEASURING METHOD

## 2-1 .Test Condition

### STANDARD

Temperature : 15 ~ 35℃

Relative humidity : 45% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

### JUDGEMENT

Temperature : 20±3℃

Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

## 2-2 . Standard Test Fixture

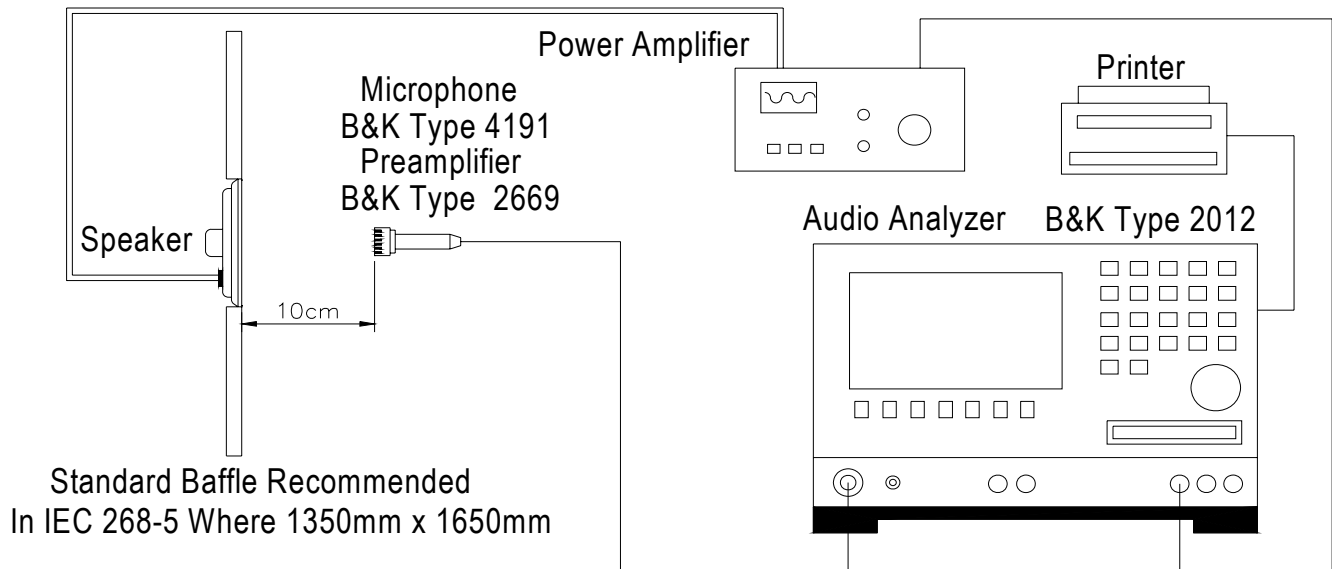
1.Input Power : 2.0W (4.0V )

2.Zero Level : -dB

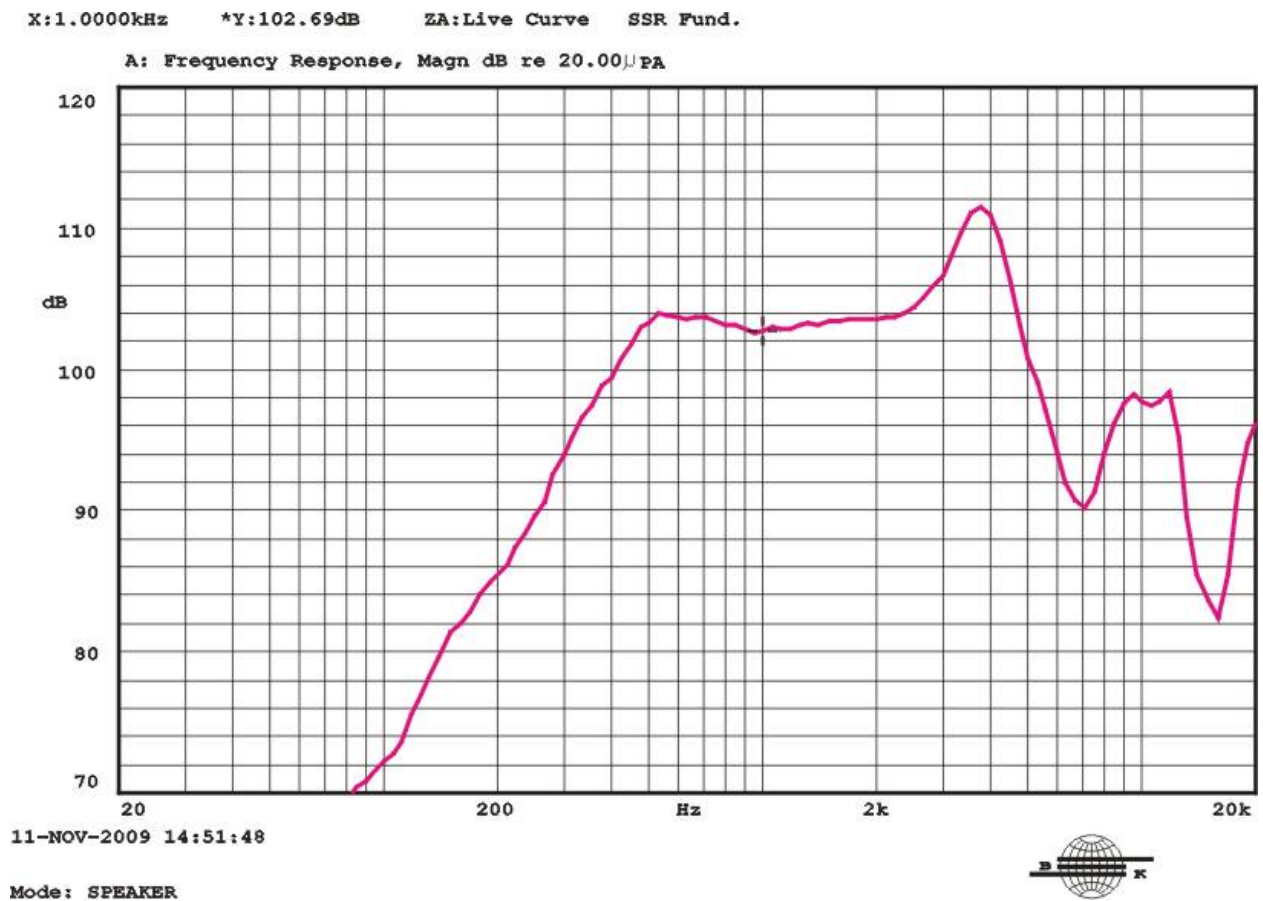
3.Mode : SPEAKER

4.potentiometer Range : 50dB

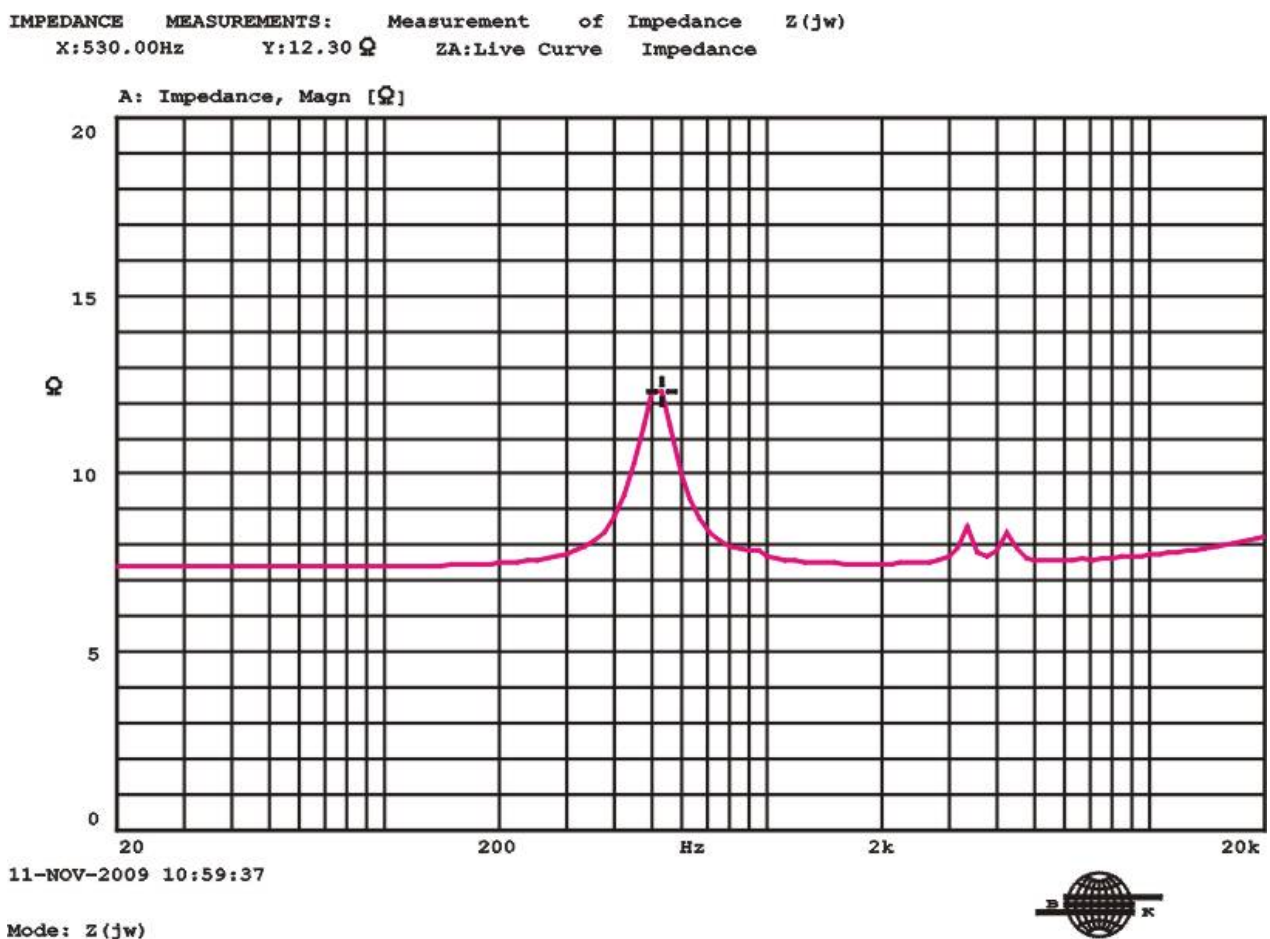
5.Sweep Time : 0.5sec



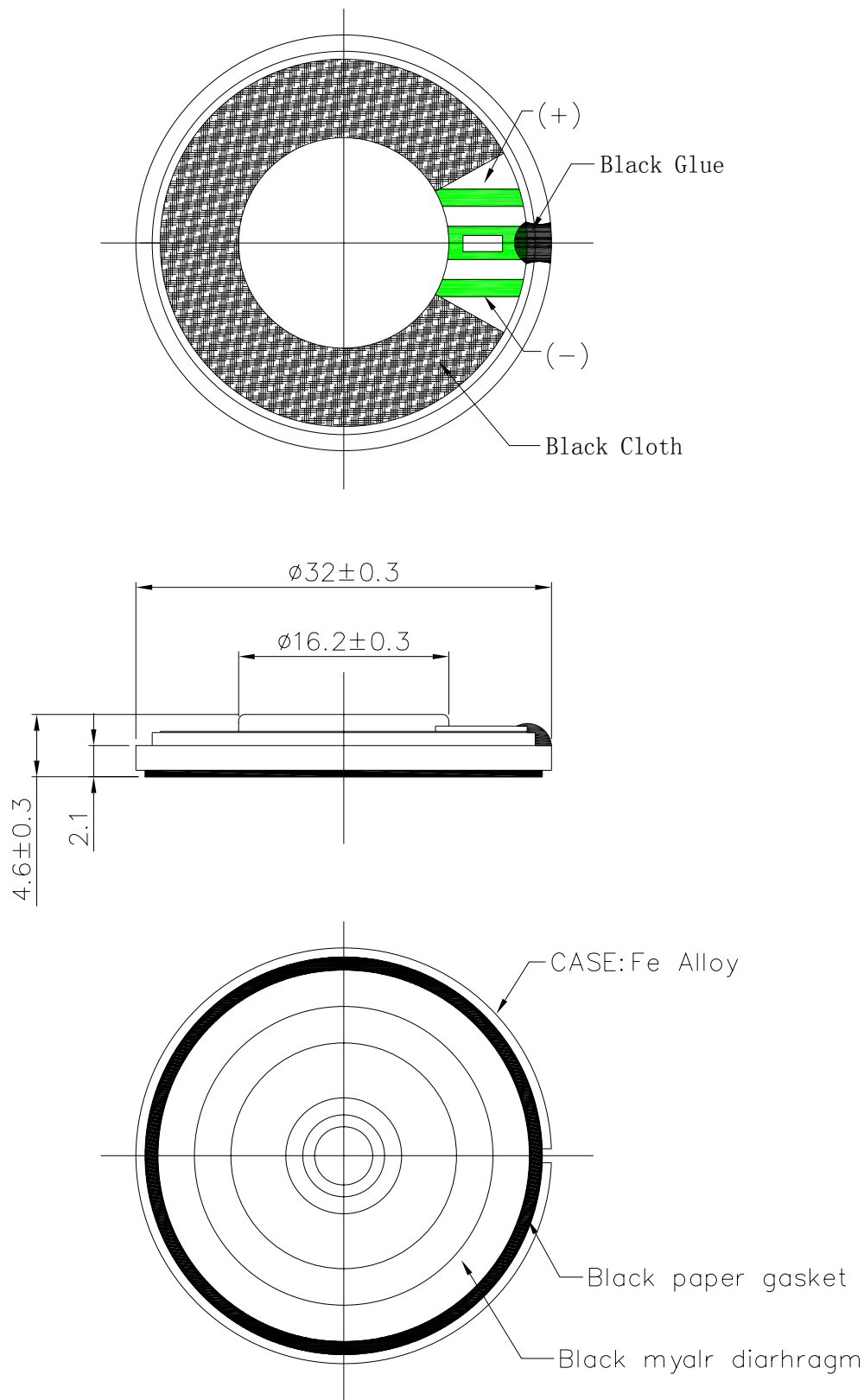
## 2-3. Frequency Response Curve



## 2-4. Impedance Curve



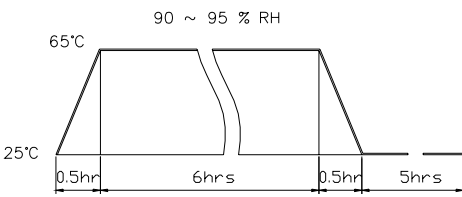
REV NO.	REVISION NOTE	APPROVAL	DATE
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TITLE: DYNAMIC SPEAKER		DRAWN: Richard 2009-7-3	SCALE: 2:1	SHEET: 1 of 1
PART NO. AS-3246B08-B2T	1	DESIGNED: R&D DEP.	UNITS: mm	
		CHECKED:	TOLERANCE $\pm 0.3$	
		APPROVAL:	UNLESS OTHERWISE SPECIFIED:	
DWG NO. A-K09070301		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 $+60^{\circ}\text{C} \pm 3^{\circ}\text{C}$ relative humidity 95% 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> 
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	Rated Power test	Rated Power white noise is applied for 96 hours
10	Max Power test	Max power 1 min on – 2 min off 10 cycles.
11	Terminal strength test	Capable of withstand 1kg load for 30 seconds without resulting in any damage or rejection.
<p>Criterion:</p> <p>After anyone test above , the change of S.P.L shall be within <math>\pm 3</math> dB</p>		

## SOLDERING CONDITION

Recommend using constant searing-iron in temperature range  $360 \pm 5^{\circ}\text{C}$ .

Soldering time 2 seconds.