SPECIFICATION FOR APPROVAL

Product	DYNAMIC SPEAKER
Part No.	AS-1741E08-A9W1
Customer Approval	

Approved By	Checked By	Made By

A & B Components

http://www.speaker-tw.com

1. SPECIFICATION

AS-1741E08-A9W1

ITEM		SPECIFICATIONS	
01	Type	Dynamic speaker	
02	Dimension	External diameter 17mm	
03	Rated Input Power	1.0 W.	
04	Max. Input Power	1.5W for 1 minute.	
05	Impedance	8 ohm ± 15% at 2K Hz	
06	Resonance Frequency (Fo)	900 Hz ± 20% at Fo, 1V	
07	Sensitivity (S.P.L.)	94dB(0.5W/0.1M) ± 3 dB	at AVE 1.0K,1.2K,1.5K,2K Hz.
		97dB(1.0W/0.1M) ± 3 dB	
08	Frequency Range	Fo – 20K Hz	
09	Total Harmonics Distortion	Max. 10% at 1K Hz ,1.0W.	
10	Voice Coil	Diameter 8.5 mm	
11	Magnet	Rare earth permanent (NdFeB) magnet Φ8.2 x 1.2t mm	
12	Weight	1.4g ± 0.3g	
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 1.0W	
15	Buzz, Rattle, etc.	Should not be audible at 2.83V 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 15 seconds without resulting in any damage or rejection.	
18	Temperature	Operating temperature: -40℃ to +85℃ Storage temperature: -40℃ to +85℃	

2. MEASURING METHOD

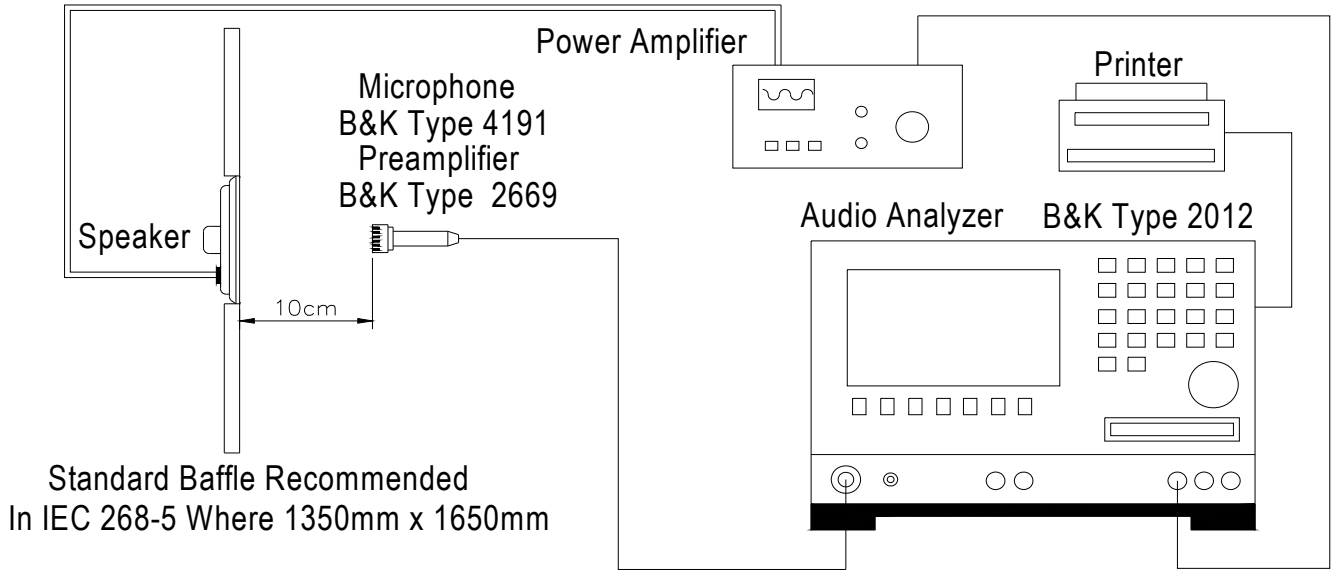
2-1 .Test Condition

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

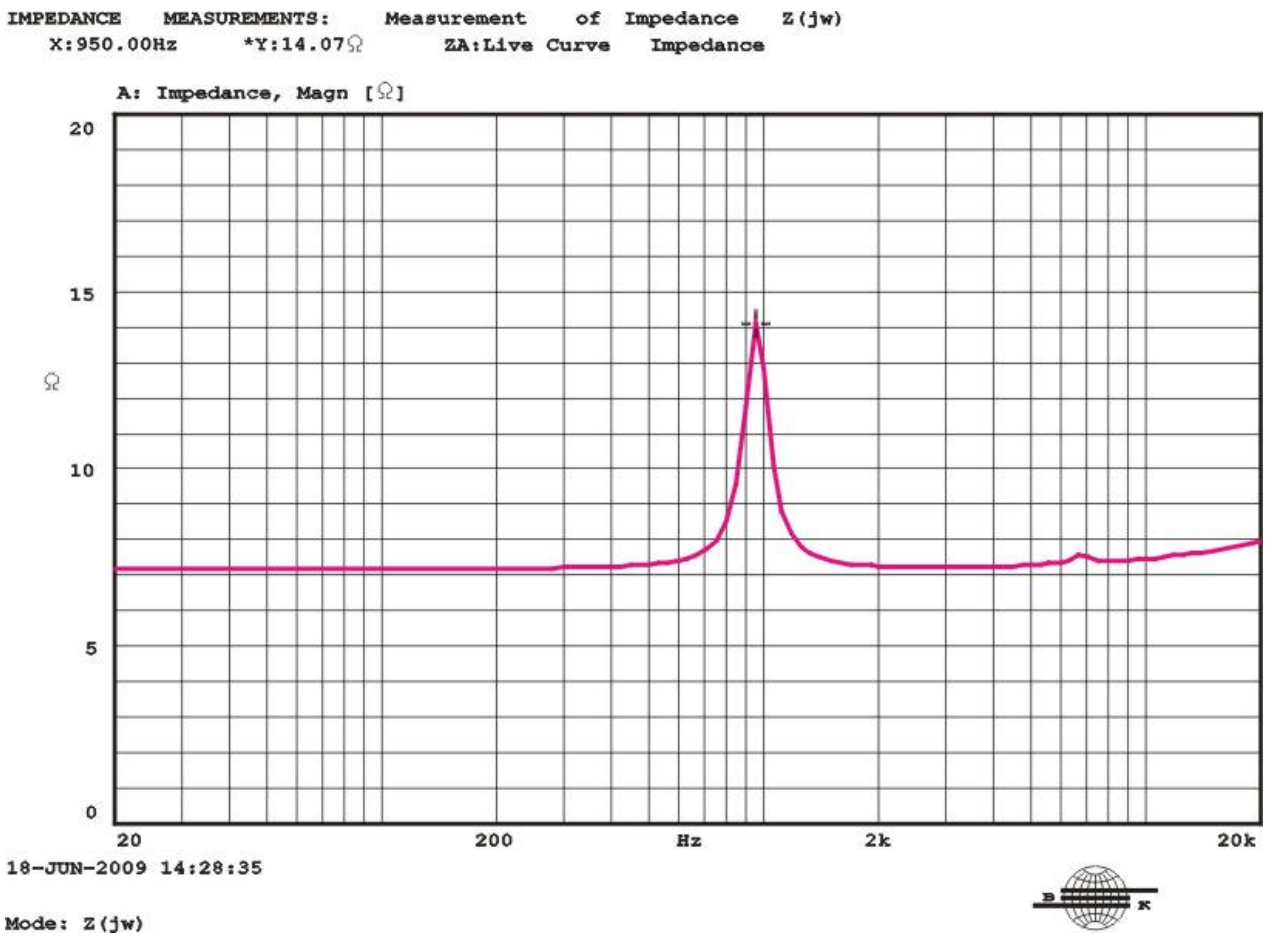
2-2 . Standard Test Fixture

1.Input Power : 1.0W(2.83V)
2.Zero Level : -dB
3.Mode : SPEAKER
4.potentiometer Range : 50dB
5.Sweep Time : 0.5sec

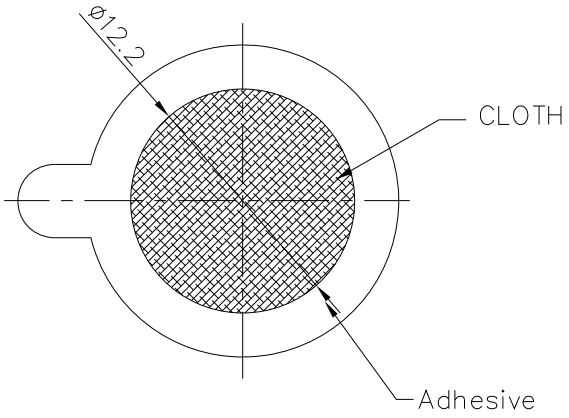


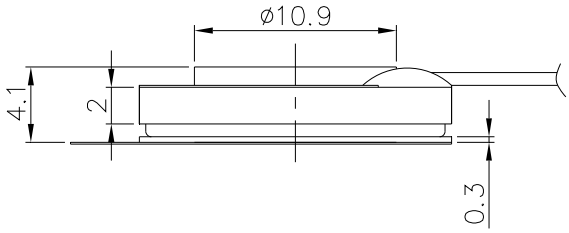
2-3. Frequency Response Curve

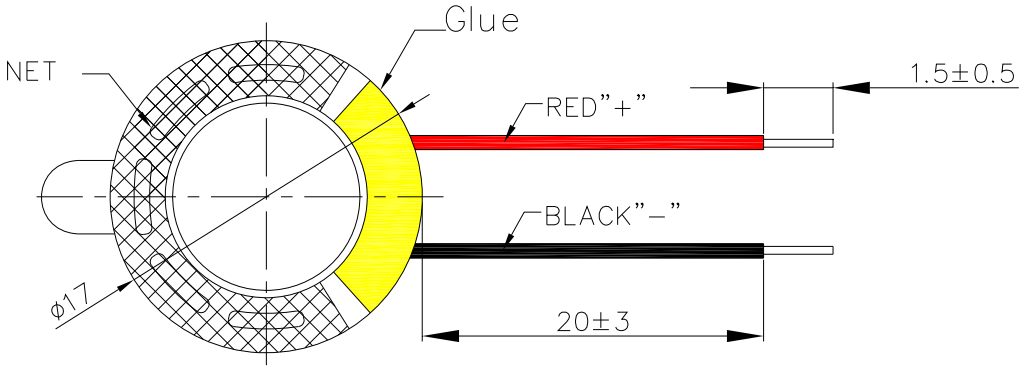
2-4. Impedance Curve



REV NO.	REVISION NOTE	APPROVAL	DATE







CASE : PBT .
DIAPHRAGM : PEN.
WIRE : UL 1571 , 32 AWG .

RoHS

TITLE: DYNAMIC SPEAKER	DRAWN: Richard 2010/05/14	SCALE: 2:1	SHEET: 1 of 1
PART NO. AS-1741E08-A9W1 1	DESIGNED: R&D DEP.	UNITS: mm	
DWG NO. HS-100514 REV	CHECKED:	TOLERANCE ± 0.3	
	APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL ± *** TWO PLACE DECIMAL ± *** THREE PLACE DECIMAL ± ***	
	MATERIAL: PBT		

A & B Components

4. RELIABLITY TESTS

Items.		Specifications
01	High temp. Test	Keep 96 hours at +85℃±3℃ and leave 3 hours in normal temperature and then check
02	Low temp. Test	Keep 96 hours at -40℃±3℃ and leave 3 hours in normal temperature and then check
03	Humidity test	Keep 96 hours at + 40℃±3℃ relative humidity 92-95% and leave 3 hours in normal temperature and then checked.
04	Thermal cycle test.	Low temperature: -40℃±3℃, temperature:+85℃±3℃, cycle: 1 hour/cycle each, and then keep 5 cycles in a room.
05	Vibration	10~55~10Hz sin-wave sweep 15min. 5G(constant) X,Y, Z 3 direction. 2 hours each, total 6 hours.
06	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.
07	Free drop test	Free drop from 100cm height to the concrete floor X,Y, Z 6 direction. 1 times each, total 6 times.
08	Load test	Rated Power White noise is applied for 96 hours
09	Max Power test	Max power 1 min. on - 2 min. off 10 cycles.
10	Terminal strength test	Capable of withstand 1kg load for 15 seconds without resulting in any damage or rejection.
Criterion : After testing any of the above reliability test items , the change of S.P.L shall be within ±3 dB		

SOLDERING CONDITION

Recommend using constant searing-iron in temperature range 360±5°C.
Soldering time 2 seconds.