# SPECIFICATION FOR APPROVAL

Product	DYNAMIC SPEAKER
Part No.	AS-2340E08-B5T
Customer	
Approval	

Approved By	Checked By	Made By



A & B Components

http://www.speaker-tw.com

# 1. SPECIFICATION

	ITEM	SPE	CIFICATIONS	
01	Туре	Dynamic speaker		
02	Dimension	External diameter 23 mm		
03	Rated Input Power	1.0 W.		
04	Max. Input Power	2.0 W.		
05	Impedance	8 ohm ± 15% at 2K Hz		
06	Resonance Frequency (Fo)	950 Hz ± 20% at  Fo, 1V		
07	Sensitivity (S.P.L.)	88dB(0.1W/0.1m) ± 3 dB	at M/E 0.9K 1.0K 1.9K 1.6K H-	
		97dB(1.0W/0.1m) ± 3 dB	at AVE 0.8K,1.0K,1.2K,1.6K Hz.	
08	Frequency Range	Fo – 5K Hz		
09	Total Harmonics Distortion	Max. 10% at 1K Hz ,1.0W.		
10	Voice Coil	Diameter 8.7mm		
11	Magnet	Rare earth permanent (Ferrite) magnet Φ8 x 1.0 mm		
12	Weight	8.5g ± 0.5g		
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 30 seconds without resulting in any damage or rejection.		
18	Temperature	Operating temperature: -20℃ to +60℃ Storage temperature: -30℃ to +70℃		

## 2. MEASURING METHOD

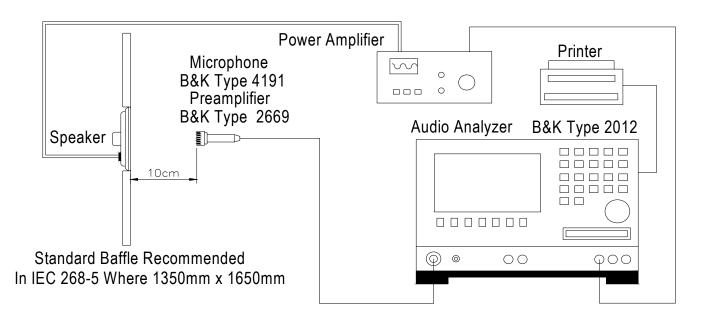
### 2-1 .Test Condition

STANDARD Temperature :  $15 \sim 35^{\circ}$ C Relative humidity :  $45\% \sim 85\%$ , Atmospheric pressure : 860mbar to 1060mbar.

JUDGEMENT Temperature :  $20\pm3^{\circ}$ C Relative humidity :  $60\% \sim 70\%$ , Atmospheric pressure : 860mbar to 1060mbar

#### 2-2 . Standard Test Fixture

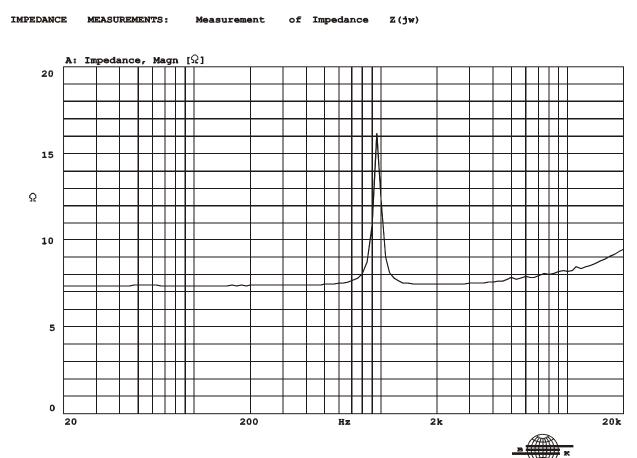
Input Power : 1.0W(2.83V)
Zero Level : -dB
Mode : SPEAKER
potentiometer Range : 50dB
Sweep Time : 0.5sec



# 2-3. Frequency Response Curve



# 2-4. Impedance Curve



Mode: Z(jw)

REV NO.	REVISION NOTE		APPROVAL DATE
		0 <sup>253</sup>	
		NET	
CASE : Fe al DIAPHRAGM : BLAC			
		ø20.6	
TITLE: DYNAMIC S PART NO. AS-2340E0	DESIGNED:	R&D DEP.	SCALE: 2:1 SHEET:10 UNITS: mm TOLERANCE ± 0.2 UNLESS OTHERWISE SPECIF ONE PLACE DECIMAL ± ***

# **3. RELIABLITY TESTS**

	Items.	Specifications		
01	High temp. Test	Keep 96 hours at +70° $C \pm 3$ ° $C$ and leave 3 hours in normal temperature and then check		
02	Low temp. Test	Keep 96 hours at -30°C $\pm$ 3°C and leave 3 hours in normal temperature and then check		
03	Humidity test	Keep 96 hours at + $60^{\circ}C \pm 3^{\circ}C$ relative humidity 95% and leave 3 hours in normal temperature and then checked.		
04	Temp./Humidity cycle	The part shall be subjected 5 cycles. One cycle shall be 12 hours and consist of; $90 \sim 95 \%$ RH $25^{\circ}C$ $90 \sim 95 \%$ RH $90 \sim 95 \%$ RH $90 \sim 95 \%$ RH $90 \sim 95 \%$ RH $90 \sim 95 \%$ RH		
05	Thermal cycle test.	Low temperature: $-30^{\circ}C \pm 3^{\circ}C$ , temperature:+ $70^{\circ}C \pm 3^{\circ}C$ , 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 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.		
Crite	Criterion :			
Afte	After these test , the change of S.P.L shall be within $\pm 3 \text{ dB}$			

# SOLDERING CONDITION

Recommend using constant branding iron in 30W, and in temperature range 350±10°C. Soldering time 2 seconds.