# SPECIFICATION FOR APPROVAL

Product	DYNAMIC SPEAKER
Part No.	AS-2692A08-C5W
Customer	
Approval	

Approved By	Checked By	Made By



A & B Components

http://www.speaker-tw.com

SPECIFICATION AS-2692A08-C5W

	ITEM SPECIFICATIONS		CIFICATIONS		
01	Туре	Dynamic speaker			
02	Dimension	External diameter 26 mm			
03	Rated Input Power	0.5 W			
04	Max. Input Power	0.6 W			
05	Impedance	8 ohm ± 15% at 1.5K Hz.			
06	Resonance Frequency (Fo)	550 Hz ± 20% at Fo, 1V			
07	Sensitivity (S.P.L.)	84dB(0.1W/0.1m) ± 3 dB	at AVE 0.6K,0.8K,1.0K,1.2K Hz.		
		$90dB(0.5W/0.1m) \pm 3 dB$	at AVE 0.0K,0.0K,1.0K,1.2K HZ.		
08	Frequency Range	Fo – 20KHz			
09	Total Harmonics Distortion	Max 8 % at 1 KHz,0.5W.			
10	Voice Coil	Diameter 10.2 mm.			
11	Magnet	Rare earth permanent (NdFeB) magnet Φ9.5x1.5 mm.			
12	Weight	$6.0g \pm 0.5 g$ .			
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 0.5W			
15	Buzz, Rattle, etc.	Should not be audible at 2.0V 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° $_{\mathbb{C}}$ to +60° $_{\mathbb{C}}$ Storage temperature: -30° $_{\mathbb{C}}$ to +70° $_{\mathbb{C}}$			

#### 1. MEASURING METHOD

#### 2-1 Test Condition

#### **STANDARD**

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

Relative humidity: 45% ~ 85%,

Atmospheric pressure: 860mbar to 1060mbar.

#### **JUDGEMENT**

Temperature : 20±3°C

Relative humidity: 60% ~ 70%,

Atmospheric pressure: 860mbar to 1060mbar

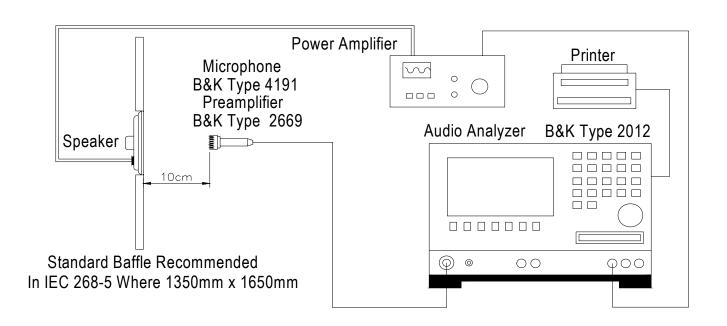
#### 2-2 . Standard Test Fixture

1.Input Power : 0.5W(2.0V)

2.Zero Level : -dB 3.Mode : SPEAKER

4.potentiometer Range: 50dB

5.Sweep Time: 0.5sec

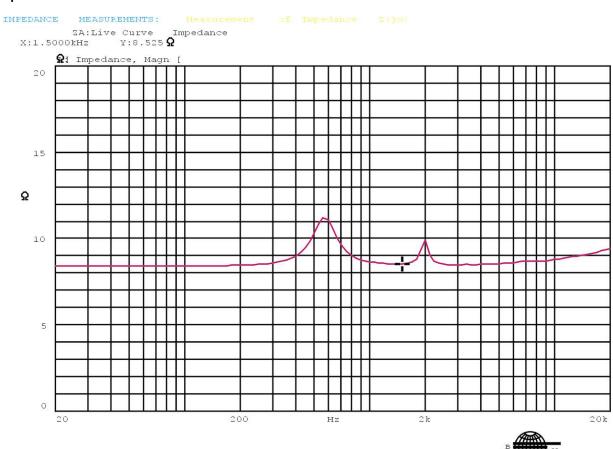


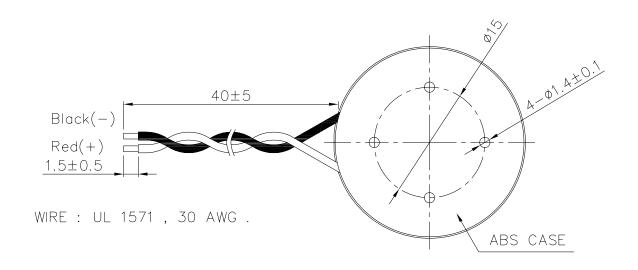
## 2-3. Frequency Response Curve

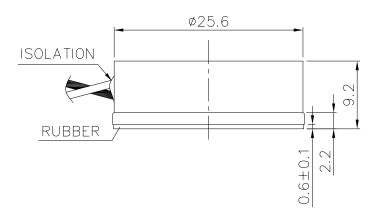


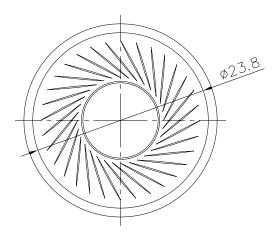
# 2-4. Impedance Curve

Mode: Z(jw)









TITLE: DYNAMIC SPEAKER		DRAWN:	Richard	06/02/2006	SCALE:	2:1	SHEET:	1 of 1		
			DESIGNED. R&D DEF.					m		
PART NO.	RT NO. AS-2692A08-C5W		CHECKED:			TOLERANCE ± 0.3				
			APPROVAL:	DDDOWAI ·			UNLESS OTHERWISE SPECIFIED ONE PLACE DECIMAL ± ***			
DWG $NO$ .	D/II/C 4.000		AI I KOVAL.			TWO PLACE DECIMAL ± ***				
	DTS-1099	REV	MATERIAL:	****				DECIMAL		

A & B Components

### 2. RELIABLITY TESTS

Items.		Specifications		
01	High temp. Test	Keep 96 hours at $+70^{\circ}$ C $\pm 3^{\circ}$ C and leave 3 hours in normal temperature and then check		
02	Low temp. Test	Keep 96 hours at -30°C±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.		
		The part shall be subjected 5 cycles. One cycle shall be 12 hours and consist of;		
04	Temp./Humidity cycle	90 ~ 95 % RH  65°C  0.5hr  6hrs  0.5hr  5hrs		
05	Thermal cycle test.	Low temperature: $-40^{\circ}$ 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.		

#### CRITERION:

After these test , the change of S.P.L shall be within  $\pm 3$  dB .