



# **Product Specification**

Product Name:	Speaker	
Part Number:	SEM-36R4.7-8N0.8R	(W8.0 Ω8)
Version:	Rev. 1.01	
Date:	2020-11-24	
Note:		

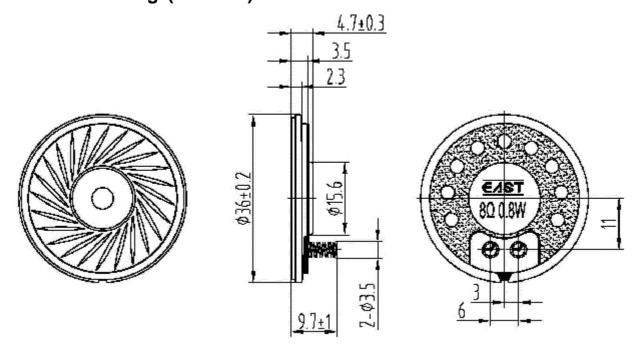
## East is an ISO 9001, IATF16949 and ISO 14001 Certified Company

### **Revision History**

Rev.	Description	Author/Date	Checked By	Approver
1.00	Released	Lv Wenbin Jul. 09. 2020	Gao Rong	Wang Jiancheng
1.01	Modify the spring	Lv Wenbin Nov. 24. 2020	Gao Rong	Wang Jiancheng

### 1. Part Number: SEM-36R4.7-8N0.8R

#### 2. Dimension Drawing: (Unit: mm)



### 3. Specification:

No.	Items	Specification	
3-1	Rated impedance	8Ω ± 15 %	at 1.5kHz
3-2	Resonant frequency (f <sub>0</sub> )	600Hz ± 20 %	1.0 V
3-3	SPL normal power input	98dB±3 0.1M / 0.8W (800,1000,1200,1500Hz average )	2.53V
3-4	Frequency range	f0 ~ 20kHz SPL-10dB	2.53V
3-5	Distortion	< 5 % at 1kHz	2.53V
3-6	Normal power	0.8 W  @ Rated noise power operating continuously for 100 hours 2.53V	
3-7	Maximum power	1.0W  @ Stimulant program signal for 1 min. on & 2 min. off, cycling for 10 times 2.83V	
3-8	Appearance normal	@ A.T. 15~35℃, H.M. 25~75%, B.P. 86~106kPa	
3-9	Buzzes & rattles no appearance	@ 0.3m with sine wave from 300Hz to 5 kHz input/rated noise power 2.53 V	
3-10	Diaphragm material	Mylar	
3-11	Weight	9.6g	

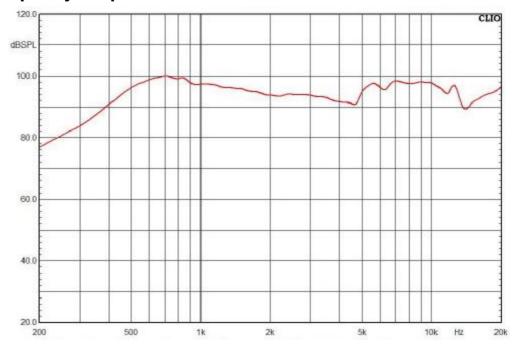
#### NOTES:

- 1. Test in anechoic room and use the IEC standard baffler which size at: 1350 mm (W) X 1650 mm (H)
- 2. Test should be made under the conditions of room temperature ( $20 \pm 10$  °C), relative humidity ( $60 \pm 20$ %) and normal atmospheric pressure. In this case, however, that the judgment is questionable, the test conditions are to be changed to room temperature  $20 \pm 2$  °C, relative humidity  $60 \sim 70$ % and normal atmospheric pressure.

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2/5

## 4. Typical Frequency Response Curve:

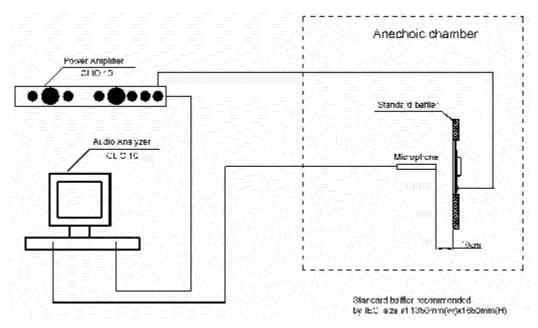


## 5. Reliability Test:

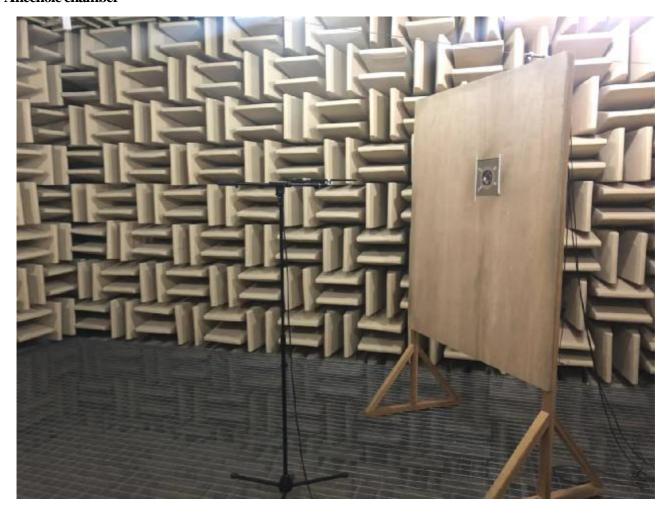
No.	Item	Method of Test	Tolerance after Testing
5-1	Operating temperature	-25 °C ~ +70°C	
5-2	High-temperature loading & storage	@ 1/4 rated noise power /80± 2 °C operating for 16 hours then depositing for 2 hours at constant temperature, completing testing within 1 hour after withdrawing.	Meet requirements of Appearance, Buzzes & rattles after test
5-3	Low-temperature loading & storage	@ $1/4$ rated noise power/- $10\pm3$ °C operating for 1 hours, depositing @ $-30\pm3$ °C for 2 hours, then resuming at normal atmosphere conditions (GB/T 9396-1996 4.2) for 4 hours.	Meet requirements of Appearance, Buzzes & rattles, solderability after test
5-4	Static humidity/temperatu re	@ A.T. $40\pm2$ °C, H.M. $93\pm2$ % depositing for 48 hours, then resuming @ normal atmosphere conditions (GB/T9396-1996 4.2) for 24 hours.	Meet Requirements of Appearance, Buzzes & rattles, insulation resistance, bearing voltage after test
5-5	Temperature (high and low) cycle test	Storage in -30 $^{\circ}$ C ± 5 $^{\circ}$ C for 2 hours, in 20 $^{\circ}$ C ± 5 $^{\circ}$ C for 2 hours, in 80 $^{\circ}$ C ± 5 $^{\circ}$ C for 2 hours then back in 20 $^{\circ}$ C ± 5 $^{\circ}$ C 2 hours, as one cycle. 12 cycle in total.	- Appearance: no
5-6	Drop a product naturally from the height of 1000 mm onto the surface of 100 mm thick wooden board. Two directions: upper and side of the product are to be applied for this drop test once respectively.		obviously damage Tone: no obviously noise
5-7	Life test in the room temperature	Input the signal with the valid frequency range on the speaker in continuously for 100 hours, the room temperature should control in 15 °C to 35 °C.	SPL±3dB F0±20%
5-8	Vibration test	Conduct the test for the directions of X Y and Z for 0.5 hour each (total 1.5 hours). To-and Fri sweep time(from 10 to 55 Hz and then 55 to 10) under single amplitude of 0.75 mm is 3 minute, then expose to the room temperature for 2 hours.	ACR ±15%

 $\ensuremath{\textbf{NOTE}}\xspace$  . The frame is allowed to deform after drop test.

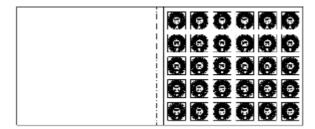
## 6. Electrical Testing Method:



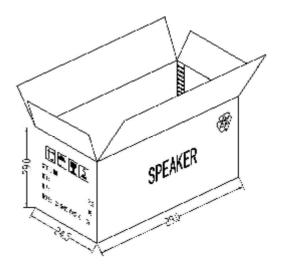
#### Anechoic chamber



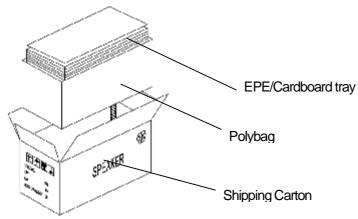
## 7. Packing Information:



30PCS / EPE/Cardboard tray



**Shipping Carton** 



#### Packing information:

- 1. Packing: 480 pcs per export carton
- 2. Carton Size: 29×24.5×29 cm
- 3. N.W:4.6 kg G.W:6.6 kg