



# **Product Specification**

Product Name:	Speaker	
Part Number:	SED-57R16-4N2RE	(4Ω 2W)
Version:	Rev. 2	
Date:	2015-07-16	
Note:		

## Company passed ISO 9001 / ISO TS16949 / ISO 14001 Certifications

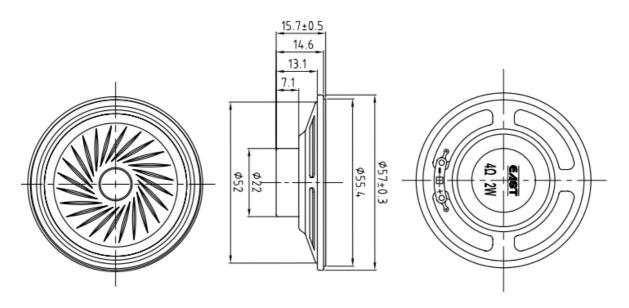
## **Revision History**

Rev.	Description	Author/Date	Checked By	Approver
1	Released	Lv Wenbin Apr. 10. 2014	Zhao Pengsen	Wang Jiancheng
2	Change appearance figure	Lv Wenbin Jul. 16. 2015	Zhao Pengsen	Wang Jiancheng

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#### 1. Part Number: SED-SED-57R16-4N2RE

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



Note: Frame surface electrophoresis coated (black).

### 3. Specification:

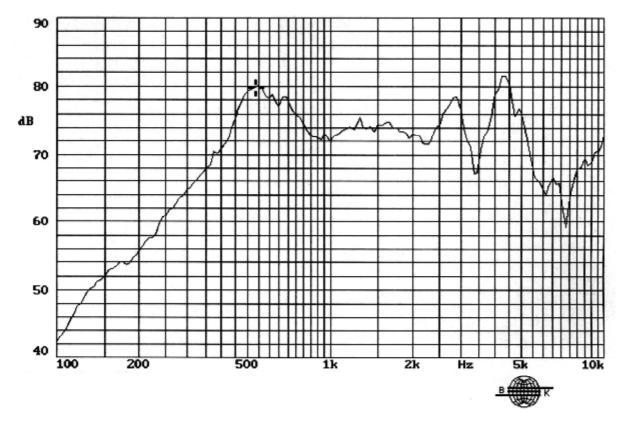
No.	Items	Specification				
3-1	Min sound pressure level	75dB (A) / 300cm / 520Hz / 5.66Vpp square wave				
3-2	Rated impedance	4Ω ±15% 1.0V				
3-3	Frequency range	400Hz ~4 kHz SPL-10dB 2.83V				
3-4	Normal power	2 W 2.83V				
3-5	Maximum power	3W 3.46V				
3-6	Appearance normal	@A.T. 15~35℃, H.M. 25~75%, B.P. 86~106kPa				
3-7	Buzzes & rattles no appearance	@ 0.3m with sine wave from 400Hz to 4kHz input/rated noise power 2.83V				
3-8	Diaphragm material	Mylar				
3-9	Operating Temperature	-20 °C ~ +85 °C				
3-10	Storage Temperature	-30 °C ~ +85°C				

#### NOTES:

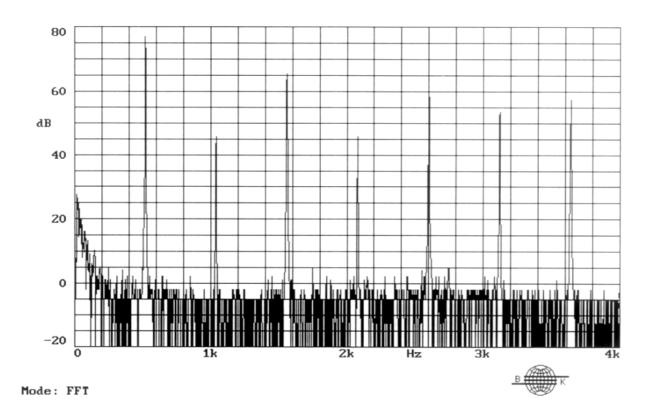
- 1. Test in anechoic room and use the IEC standard baffler which size at: 1350 mm (W) X 1650 mm (H)
- 2. Test should be made under the conditions of room temperature ( $20 \pm 10$  °C), relative humidity ( $60 \pm 20$ %) and normal atmospheric pressure. In this case, however, that the judgment is questionable, 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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## 4. Typical Frequency Response Curve:



### 5. FFT Curve:



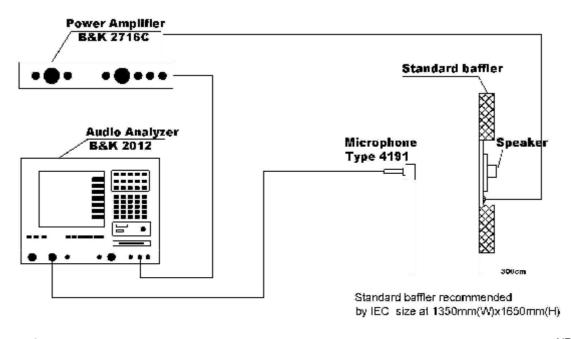
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## 6. Reliability Test:

No.	Item	Method of Test	Tolerance after Testing
6-1	Operating temperature	-20°C ~ +85°C	
6-2	High-temperature loading & storage	@ $1/4$ rated noise power /85 ± 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
6-3	Low-temperature loading & storage	@ $1/4$ rated noise power/-10 $\pm$ 3 °C operating for 1 hours, depositing @ -20 $\pm$ 3 °C for 2 hours, then resuming at normal atmosphere conditions (GB/T9396-1996 4.2) for 4 hours.	Meet requirements of Appearance, Buzzes & rattles, solderability after test
6-4	Static humidity /temperature	@ A.T. $40 \pm 2$ °C, H.M.93 $\pm 2$ % 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
6-5	Temperature (high and low) cycle test	Storage in -20 °C $\pm$ 5 °C for 2 hours, in 20 °C $\pm$ 5 °C for 2 hours, in 85 °C $\pm$ 5 °C for 2 hours then back in 20 °C $\pm$ 5 °C 2 hours, as one cycle. 12 cycle in total.	Appearance: no
6-6	Drop test	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
6-7	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%
6-8	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%

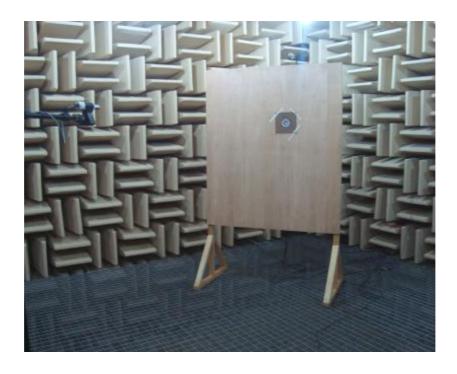
**NOTE**: The frame is allowed to deform after drop test.

## 7. Electrical Testing Method:

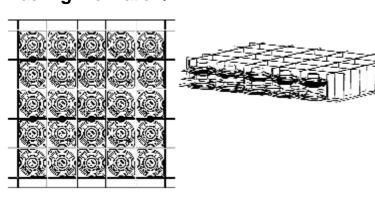


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### Anechoic chamber



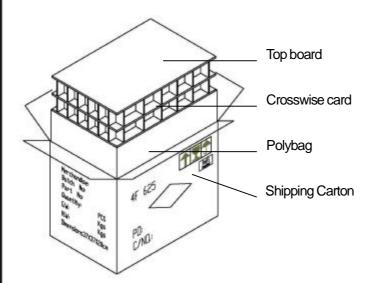
## 8. Packing Information:





75Pcs / Crosswise card

Shipping Carton



#### Packing information:

- 1 · Packing: 375 pcs per export carton
- 2 · Carton Size: 37×37×28cm
- 3 · N.W: 11.6 kg G.W: 13.5kg

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