



Product Specification

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Product Name:	Speaker
Part Number:	SED-57R28-8N5R
Version:	1.0
Date:	2023-4-19
Note:	

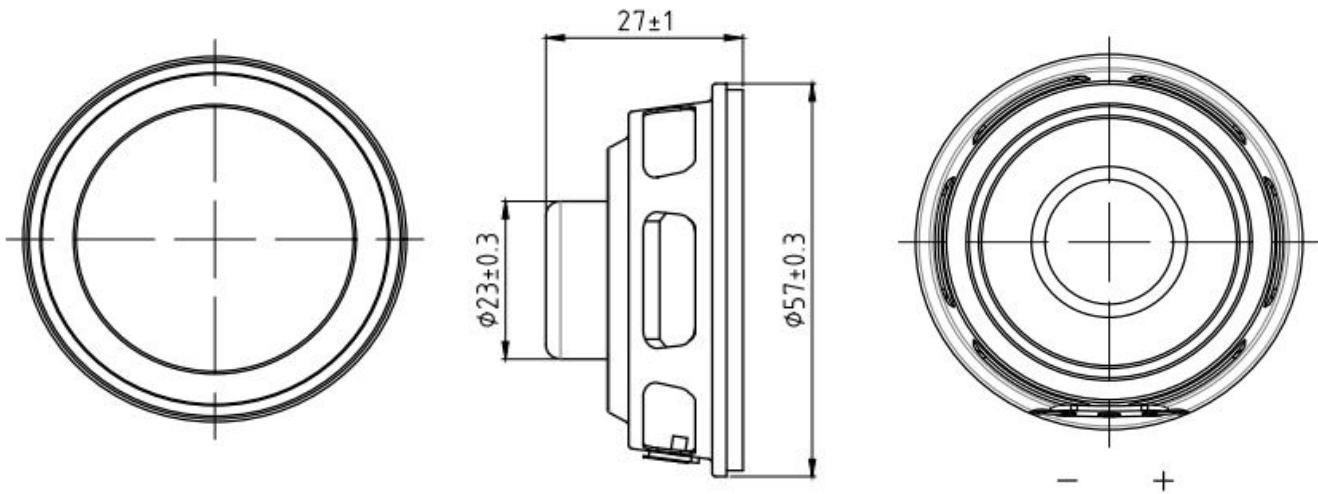
East is an ISO 9001 , IATF16949 and ISO 14001 Certified Company

Revision History

Rev.	Description	Author/Date	Checked By	Approver
1.0	Released	金加豪 2023-4-19	周远泽	王建成

1. Part Number SED-57R28-8N5R

2. Dimension Drawing (Unit: mm)



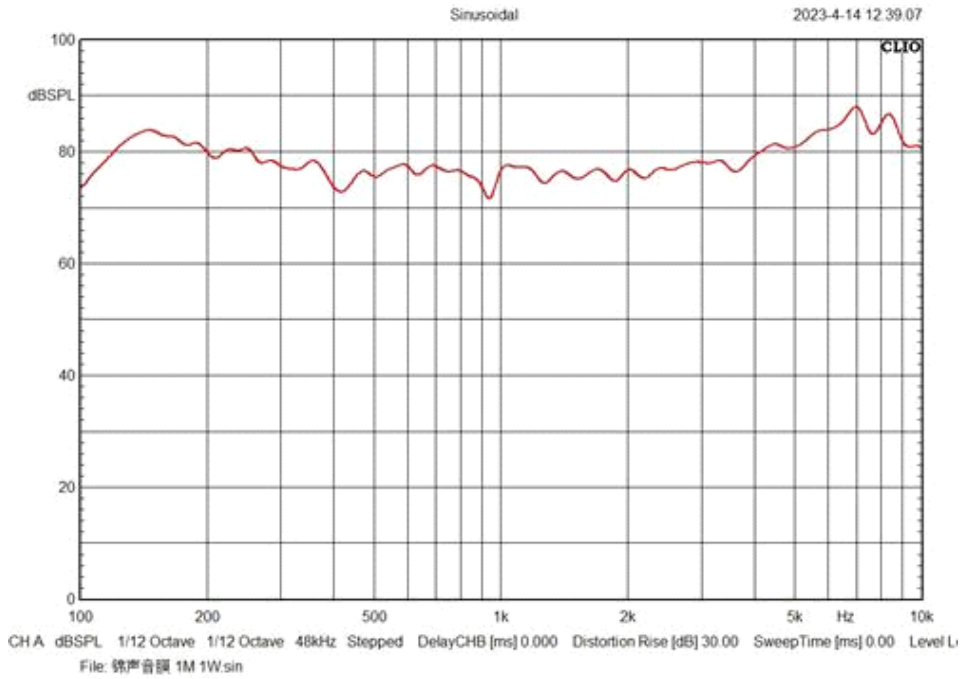
3. Specification

No.	Item	Specification
3-1	Sound pressure level	83±3dB 1M/1W at 150Hz 2.83V
3-2	Rated impedance	8Ω ± 15% at 1kHz
3-3	Frequency range	100~ 10kHz SPL±10dB 2.83V
3-4	Resonant frequency (f0)	150Hz ± 20 % 1.0 V
3-5	Normal power	5W @ Rated noise power operating continuously for 100 hours 6.32V
3-6	Maximum power	6W @ Stimulant program signal for 1 min. on & 2 min. off, cycling for 10 times 6.92V
3-7	Buzzes & rattles no appearance	@ 0.3m with sine wave from 150Hz to 10kHz input/rated noise power 6.32V
3-8	Diaphragm material	Rubber+paper
3-9	Distortion	<5% at (200Hz~10kHz) 2.83V
3-10	Appearance normal	@ A.T. 15~35°C, H.M. 25~75%, B.P. 86~106kPa
3-11	Operating Temperature	-40 °C ~ +85 °C
3-12	IP	IP67 see figure 6
3-13	weight	36g

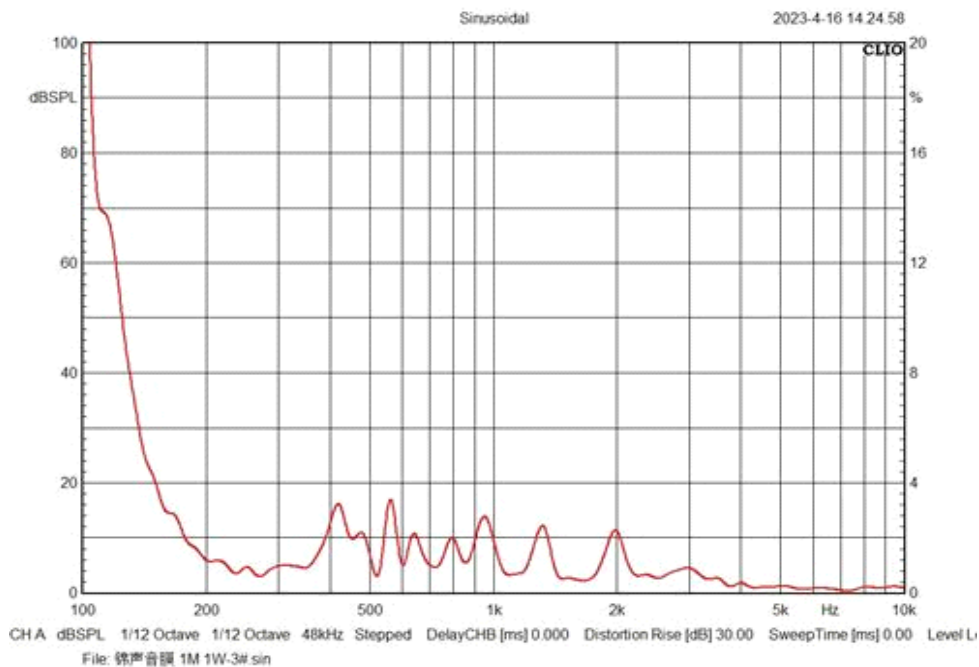
NOTES:

1. Test in anechoic room and use the IEC standard baffle which size at : 1350 mm (W) X 1650 mm (H)
2. Test should be made under the conditions of room temperature ($20 \pm 10 \text{ }^\circ\text{C}$), 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 $20 \pm 2 \text{ }^\circ\text{C}$, relative humidity 60~70% and normal atmospheric pressure.

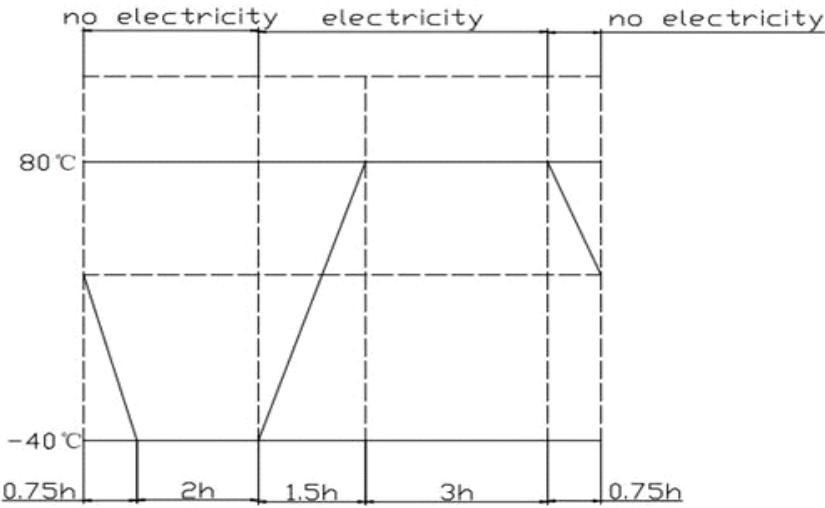
4.1 Typical Frequency Response Curve



4.2 THD Curve

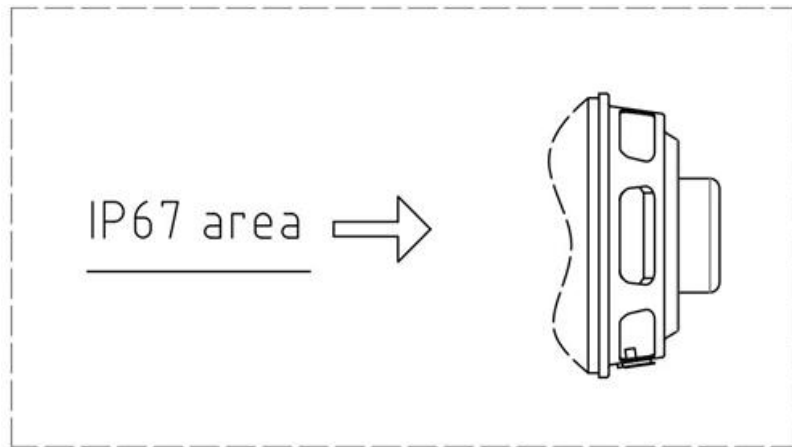


5. Reliability Test

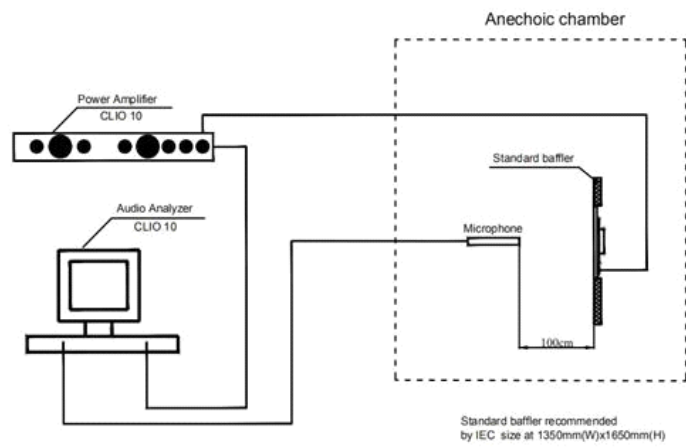
No.	Item	Method of Test	Tolerance after Testing
5-1	Operating temperature	-40 °C ~ +85°C	1.Electrical performance: SPL ±5dB F0 ±20% Rated impedance ± 15%
5-2	High Temperature Endurance Test	Components shall be operating(at rated power, with pink noise) in a chamber with temperature+80°C for 96hours, then measured after leaving in natural condition for 2 hours.	
5-3	Low temperature Endurance Test	Components shall be operating(at rated power,with pink noise) in a chamber with temperature -40°C for 24hours, then measured after leaving in natural condition for 2 hours.	
5-4	High and low temperature Cycle Test	<p>Conduct the test for 12 cycles under the temperature conditions as shown in below figure, the cooling and low temperature areas are inaction, while the heating and high temperature areas are with power supply.</p> 	2. Tone: no obviously noise
5-5	Thermal Shock Test	<p>Storage at +85°C,-40°C for 304 cycles →Tmax+85°C dwell time 30 min →Transfer components from Tmax 80°C to Tmin -40°C within 30 seconds →Tmin-40°C dwell time 30 min No operational,1cycle After cycle, components shall be measured after being placed in natural condition for 2 hours.</p>	
5-6	Thermal Humidity Cycle Test	<p>Cycles between -10°C and +65°C - Humidity 95%RH -Tmax +65°C -Tmin-10°C -Transition Rate 10°C/min - Total Duration 240h (10 cycles of 24h) After cycle, components shall be measured after being placed in natural condition for 2 hours.</p>	

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

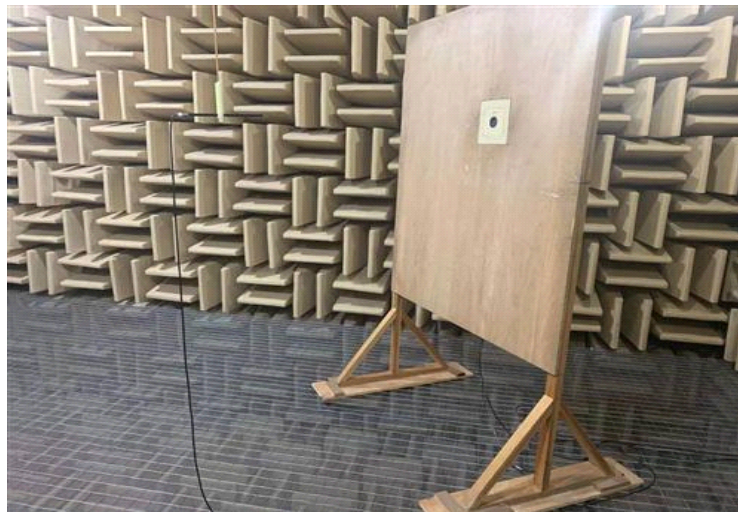
6. IP aera Figure



7. Electrical Testing Method



Anechoic chamber: (6M X 5M X 4M)



8. Packing Information

TBD