Product Specification

Product Name:	Speaker
Part Number:	SEM-20R3.3-8N0.3RL89 (8Ω 0.3W)
Version:	Rev. 2
Date:	2020-5-11
Note:	

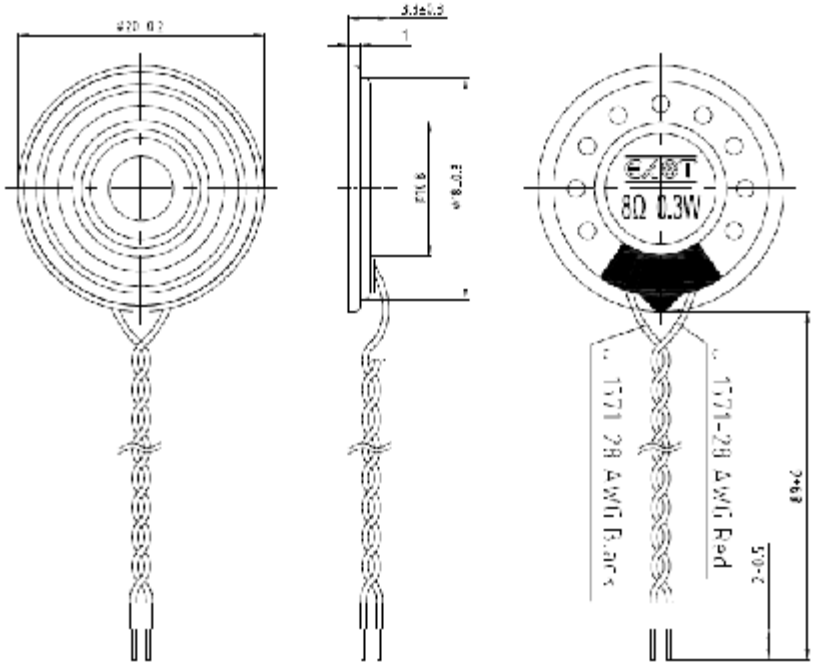
East is an ISO 9001，IATF 16949 and ISO 14001 Cartified Company

Revision History

Rev.	Description	Author/Date	Checked By	Approver
1	**Released**	**Lv Wenbin Jun. 16. 2016**	**Zhao Pengsen**	**Wang Jiancheng**
2	Coil wire change to Class 155 solderable enameled supoer-high tension wire	**Gao Rong May. 11. 2020**	**Lv Wenbin**	**Wang Jiancheng**

1. Part Number : SEM-20R3.3-8N0.3RL89

2. Dimension Drawing: (Unit: mm)



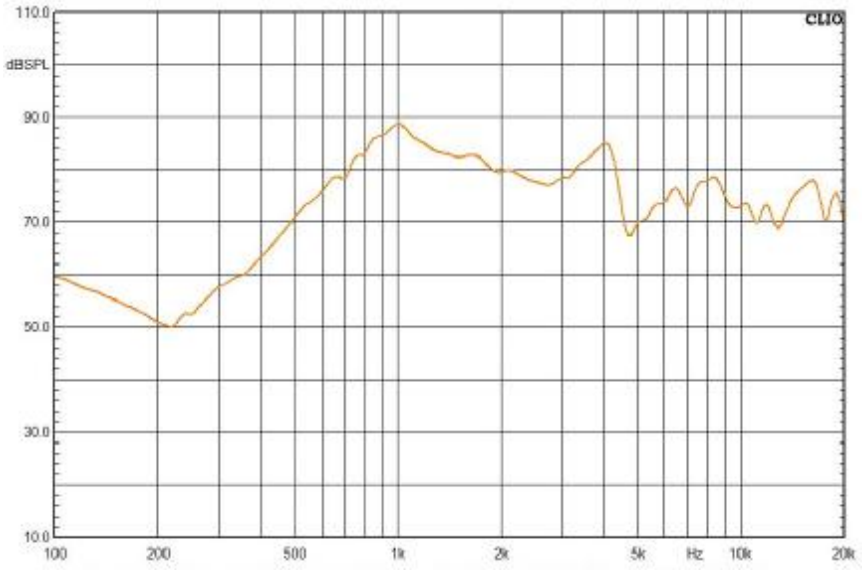
3. Specification:

No.	Items	Specification
3-1	Rated impedance	8Ω± 15 % at 2kHz
3-2	Resonant frequency (f0)	1000Hz ± 20 % 1.0 V
3-3	SPL normal power input	82dB±3 0.5M / 0.3W (1800,2000,2200,2500Hz average) 1.55V
3-4	Frequency range	f0 ~20 kHz SPL-10dB 1.55V
3-5	Distortion	＜ 5 % at 1kHz 1.55V
3-6	Normal power	0.3W @ Rated noise power operating continuously for 100 hours 1.55V
3-7	Maximum power	0.5W @ Simulant program signal for 1 min. on & 2 min. off, cycling for 10 times 2.0V
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 600Hz to 20 kHz input/rated noise power 1.55V
3-10	Diaphragm material	Mylar (Black)
3-11	Weight	3.0g

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 ±10 °C), relative humidity (60 ±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 ±2 °C, relative humidity 60~70% and normal atmospheric pressure.

4. Typical Frequency Response Curve:

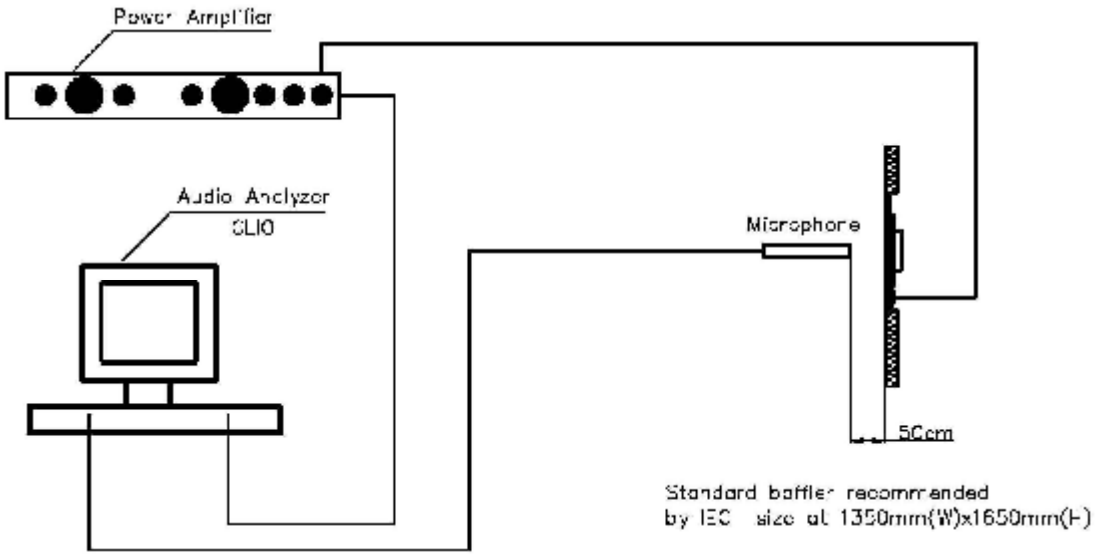


5. Reliability Test:

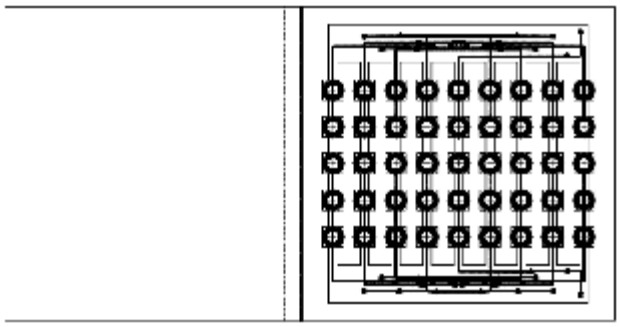
No.	Item	Method of Test	Tolerance after Testing
5-1	Operating temperature	-25 °C ~ +60°C	
5-2	High-temperature loading & storage	@ ¼ rated noise power /55 ± 2 °C operating for 16 hours then depositing for 2 hours at constant temperature,completing testing within 1 hour after withdrawing.	Meet requirements of Appearance、Buzzes & rattles after test
5-3	Low-temperature loading & storage	@ ¼ rated noise power/-10 ± 3 °C operating for 1 hours, depositing @ -25± 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
5-4	Static humidity /temperature	@ A.T. 40 ± 2 °C, H.M.93± 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
5-5	Temperature (high and low) cycle test	Storage in -25 °C ± 5 °C for 2hours, in 20 °C ± 5 °C for 2 hours, in 60°C ± 5 °C for 2 hours then back in 20 °C ± 5 °C 2 hours, as one cycle. 12 cycle in total.	Appearance: no obviously damage Tone: no obviously noise SPL ±3dB F0 ±20%
5-6	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.	
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.	

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%
5-9	Soldering test	Dip the connecting pad in soldering at 255 ± 5°C for 3±0.5 seconds.	Solder shall be attached around over 95% of the dipped portion
NOTE: The frame is allowed to deform after drop test.			

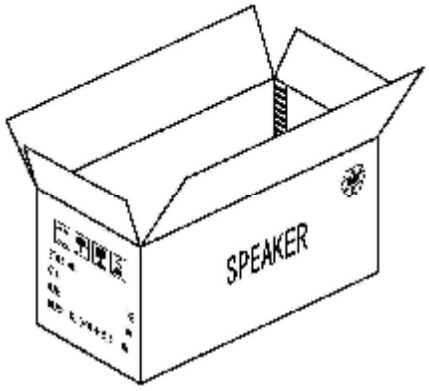
6. Electrical Testing Method:



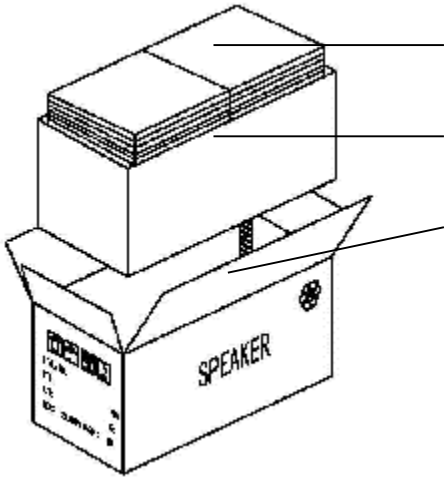
7. Packing Information:



EPE/Cardboard tray



Shipping Carton



Packing information:

1、Packing: 1800 pcs per export carton

2、Carton Size: 59.5×30×25.5 cm

3、N.W:5.4kg G.W: 7.4kg