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	CN	MODEL NAME: OWR-0920T-16C		

Specification for Preliminary Receiver

Customer No.	
Model Name	OWR-0920T-16C
Note	This item was compliance with following the provisions: 1. RoHS directive 2. REACH

	DRAWN	CHECKED	APPROVED
CUSTOMER SIGN			
OLE WOLFF SIGN	Nathan Chen 2017. 11. 13		

REVISION NOTES:

Date	DESCRIPTION OF REVISION	Rev. No.
2017.11.13	Initial version	Rev.0

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1. SCOPE

THIS SPECIFICATION IS APPLIED FOR A DYNAMIC SPEAKER FOR EARPHONE.

2. TEST CONDITIONS

TEMPERATURE : 18°C ~ 22°C

HUMIDITY : 65% +/-5% (R.H.)

ATMOSPHERE : 860 ~ 1060 hPa

3. GENERAL REQUIREMENTS

OPERATING TEMPERATURE RANGE: -25° C ~ 60° C

STORAGE TEMPERATURE RANGE: -25° C ~ 70° C

4. MECHANICAL LAYOUT & DIMENSIONS

DIMENSIONS : SHOWN IN FIGURE 4.

NET WEIGHT: 0.55 g

5. ELECTRICAL AND ACOUSTICAL CHARACTERISTICS

1	Impedance	16Ω ± 15% at 1kHz with 0.126V input.
2	Sound Pressure Level	100±3 dB at 1kHz with 0.126V input on a 2cc coupler (0dB=20μPa) Measure setup as shown in Fig.1 Binning: Bin A, 103 ~ 101dB, dot mark = red; Bin B, 100.99 ~ 99dB, dot mark = white; Bin C, 98.99 ~ 97dB, dot mark = blue.
3	Frequency response	Mask as shown in Fig.3. (Test input 0.126V/ 2cc)
4	Resonance frequency	3000± 15% Hz under 0.126V input.
5	Total Harmonic Distortion (THD)	Upper limit for THD as shown in Fig.3. (Test input 0.126V/ 2cc)
6	Input Power	(Nom. /Max.): 5mW / 10mW.
7	Rub & Buzz	Driver must be free of audible noise at 0.28V sine wave between 50Hz-10kHz.

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6. Reliability Test Requirements

Sensitivity difference at 1000Hz shall be within $\pm 3\text{dB}$ from initial value after each test. The measurement shall be done after minimum 1hour and maximum 2 hours with conditioning of $18^{\circ}\text{C} \sim 25^{\circ}\text{C}$.

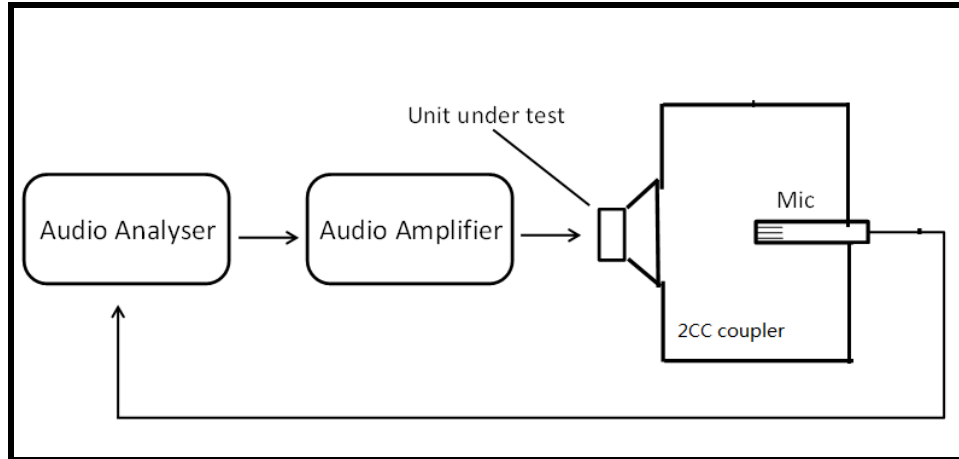
No.	ITEMS	TEST CONDITION	
1	HIGH TEMPERATURE TEST STORAGE	Temperature	$60 \pm 3^{\circ}\text{C}$
		Duration	96hrs
2	LOW TEMPERATURE TEST STORAGE	Temperature	$-25 \pm 3^{\circ}\text{C}$
		Duration	96hrs
3	HIGH TEMPERATURE HUMIDITY TEST	Temperature	$40 \pm 3^{\circ}\text{C}$
		Humidity	90%--95%(RH)
		Duration	96hrs
4	DROP TEST	Height	1m to concrete
		Total times	10 times
5	TEMPERATURE CYCLE TEST	Temperature	$-25 \pm 3^{\circ}\text{C} \leftrightarrow 60 \pm 3^{\circ}\text{C}$
		Duration	2hours, 5mins, 2hours
		Cycles	5 cycles
6	MAX. SHORT TERM POWER TEST	Test signal and Temperature	Pink noise / 25°C
		Test input power	0.4Vrms
		Cycles	1sec On, 1min Off, 60 cycles
7	RATED POWER TEST	Test signal and Temperature	Pink Noise / 25°C
		Test input power	0.28Vrms
		Duration	96hrs

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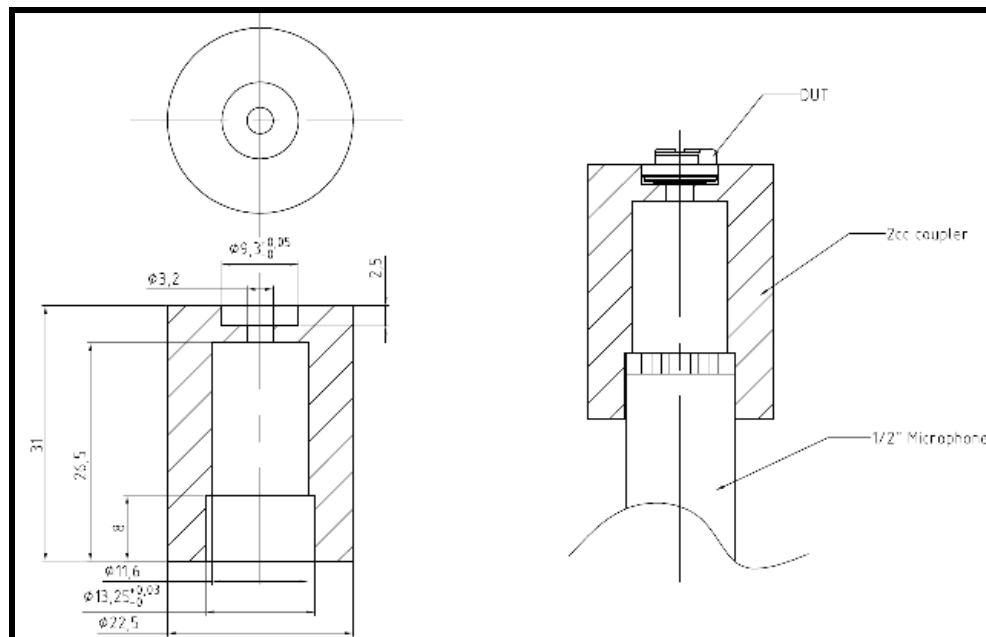
7. Test setup (Fig.1)

MEASUREMENT CIRCUIT FOR DYNAMIC SPEAKER



NO	EQUIPMENT	REMARKS
1	UNIT UNDER TEST	SPEAKER
2	2CC COUPLER	OLE WOLFF 2CC COUPLER
3	AUDIO POWER AMPLIFIER	LEM DPA300
4	ANALYZER	LISTEN SOUNDCHECK

8. 2cc coupler (Fig.2)

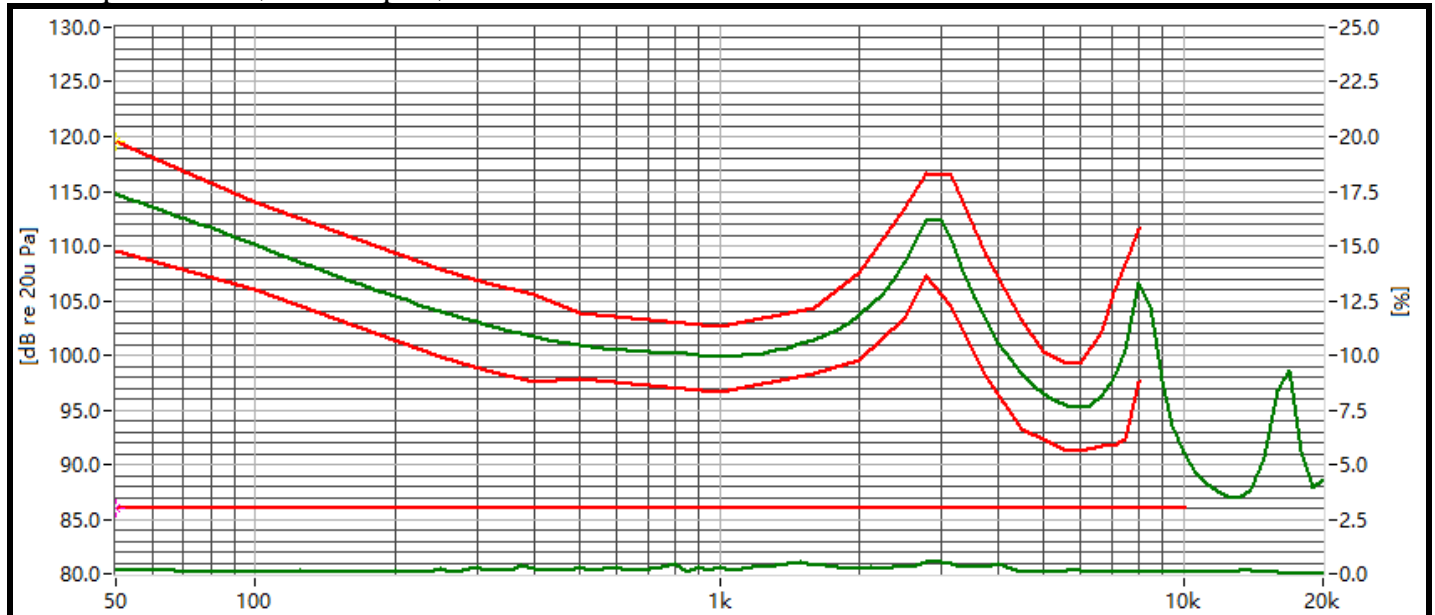


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9. Standard Frequency Response Curve & Standard THD (Fig.3)

Test input 0.126V, 2cc coupler, 1/6 octave



FR Mask

F. POINT	50	100	250	315	400	500	710	1000	1600	2000	2500	Hz
Upper limit	+5	+4	+4	+4	+4	+3	+3	+3	+3	+4	+5	dB
Lower limit	-5	-4	-4	-4	-4	-3	-3	-3	-3	-4	-5	dB

F. POINT	2800	3150	3750	4500	5000	5600	6000	6700	7100	7500	8000	Hz
Upper limit	+4.5	+6	+6	+5	+4	+4	+4	+6	+8	+8	+5	dB
Lower limit	-5	-6	-5	-5	-4	-4	-4	-4.5	-6	-8	-9	dB

THD Mask

F. POINT	50	10000	Hz
Upper limit	3	3	%

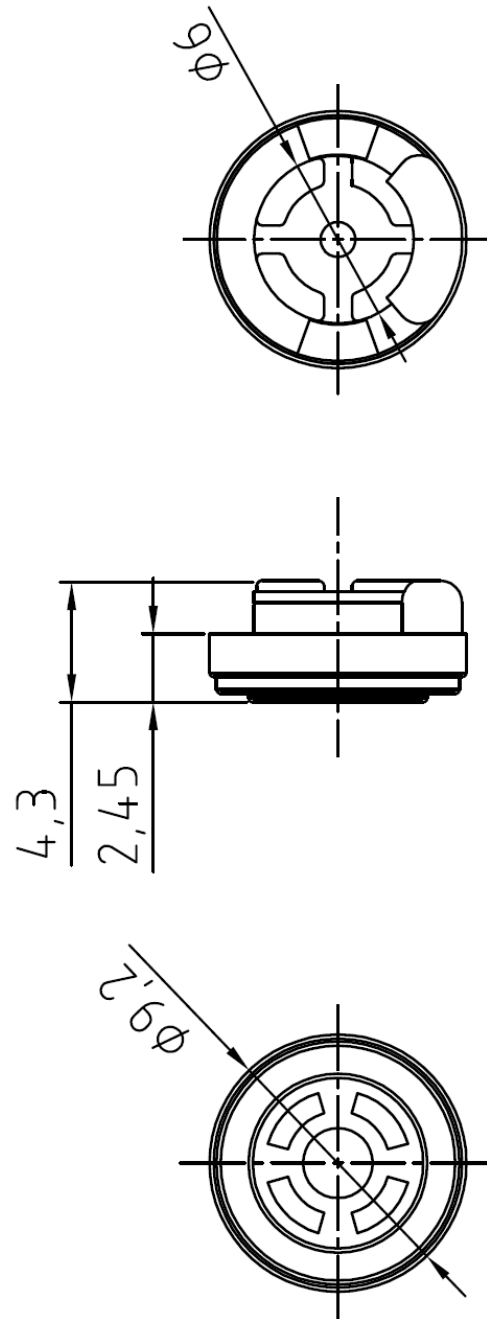
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10. Dimension (Fig.4)

Unit: mm

Tolerance: +/-0.3



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