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# PRELIMINARY SPECIFICATION

## Receiver

Part Number	OWR-0745T-32
Note	This item is in compliance with the following requirements: 1. RoHS directive 2. REACH
Customer P/N	

Ole Wolff	Signature / Date	Prepared	Checked	Approved
		Nathan Chen 2021.09.08		

Customer	Signature / Date	Confirmation		

### REVISION NOTES:

Date	Rev.	Description of Revision
2021.08.05	00	Initial version
2021.09.08	01	Corrected SPL @ 1kHz.

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## 1. SCOPE

THIS SPECIFICATION IS APPLIED FOR A DYNAMIC RECEIVER FOR EARPHONE.

## 2. TEST CONDITIONS

TEMPERATURE: 24°C ~ 27°C

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

ATMOSPHERE: 860 ~ 1060 hPa

## 3. GENERAL REQUIREMENTS

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

STORAGE TEMPERATUR RANGE: -25° C ~ 60° C

## 4. MECANICAL LAYOUT & DIMENSIONS

DIMENSIONS : SHOWN IN FIGURE.5

NET WEIGHT: 0.56g

## 5. ELECTRICAL AND ACOUSTICAL CHARACTERISTICS

1	Impedance on IEC60318-4	32Ω ± 15% at 1000Hz with 0.179V/1mW
2	Sound Pressure Level on IEC 60318-4	113 ± 3dB at 1000Hz with input 0.179V/1mW (OdB=20μPa) Measure setup as shown in Fig.1
3	Resonance frequency on IEC 60318-4	2.3kHz ± 15% with input 0.179V/1mW (Temperature 24~27°C, humidity 55-65%)
4	Frequency response on IEC 60318-4	Typical performance as shown in Fig.6. (Test input 0.179V/1mW)
5	Total Harmonic Distortion on IEC 60318-4	THD as shown in Fig.6 (Test input 0.179V/1mW)
6	Input Power	(Nom./Max.): 1mW /TBD
7	Rub & Buzz	Speaker must be free of audible noise at 0.179V 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  $24^{\circ}\text{C} \sim 27^{\circ}\text{C}$ .

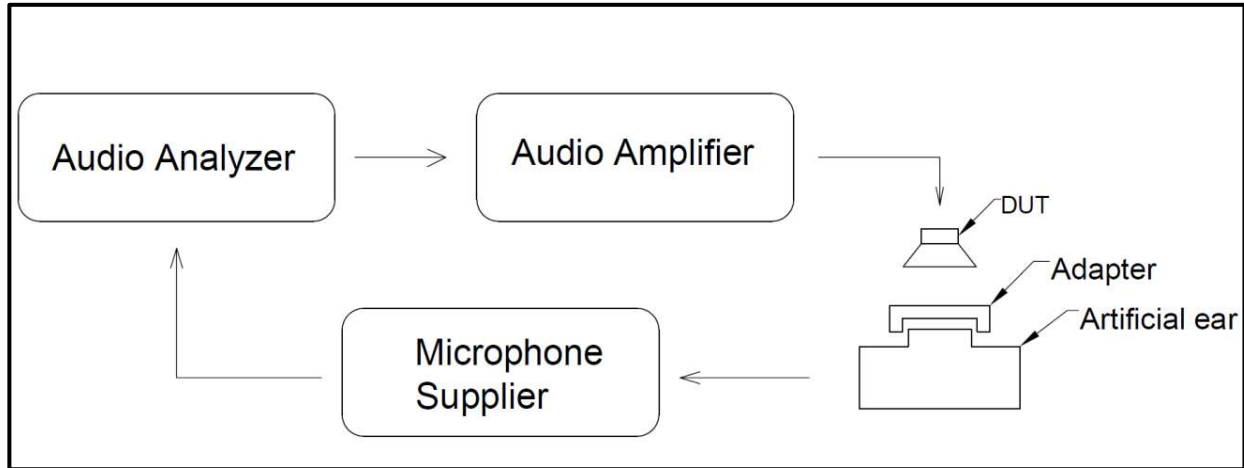
No.	ITEMS	TEST CONDITION	
1	HIGH TEMPERATURE TEST STORAGE	Temperature	$60 \pm 3^{\circ}\text{C}$
		Duration	96hrs
2	LOW TEMPERATURE TEST STORAGE	Temperature	$-25 \pm 3^{\circ}\text{C}$
		Duration	96hrs
3	HIGH TEMPERATURE HUMIDITY TEST	Temperature	$40 \pm 3^{\circ}\text{C}$
		Humidity	90%--95%(RH)
		Duration	96hrs
4	DROP TEST	Height	With protector grill 0.75m 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	SHORT TERM MAX INPUT TEST	Test signal and Temperature	Pink noise / $25^{\circ}\text{C}$
		Test input power	TBD
		Cycles	1sec On, 1min Off, 60cycles
7	LONG TERM MAX INPUT TEST	Test signal and Temperature	Pink noise / $25^{\circ}\text{C}$
		Test input power	TBD
		Cycles	1min On/ 2min Off, 10 cycles
8	RATED POWER TEST	Test signal and Temperature	Pink Noise / $25^{\circ}\text{C}$
		Test input power	1mW/0.179Vrms
		Duration	96hrs

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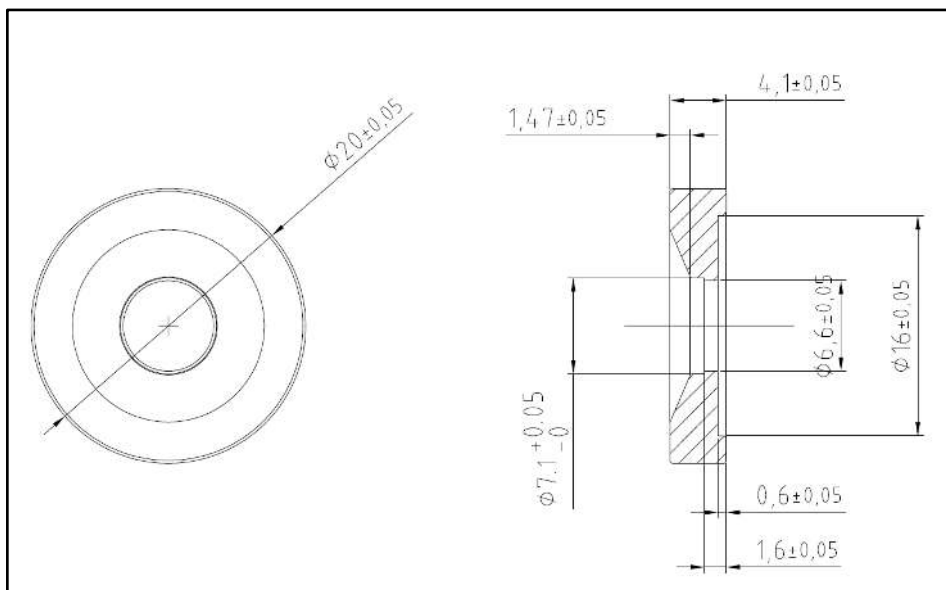
## 7. TEST SET UP AND TEST JIG

### 7.1 MEASUREMENT CIRCUIT FOR DYNAMIC RECEIVER (Fig.1)



NO	EQUIPMENT	REMARKS
1	DUT	Receiver
2	Adapter	As shown on Fig.2
3	Audio Analyzer	LISTEN SOUNDCHECK
4	Audio Amplifier	LEM DPA300
5	Artificial ear	GRAS 43AC
6	Microphone supplier	GRAS 12AX

### 7.2 Adapter (Fig.2)

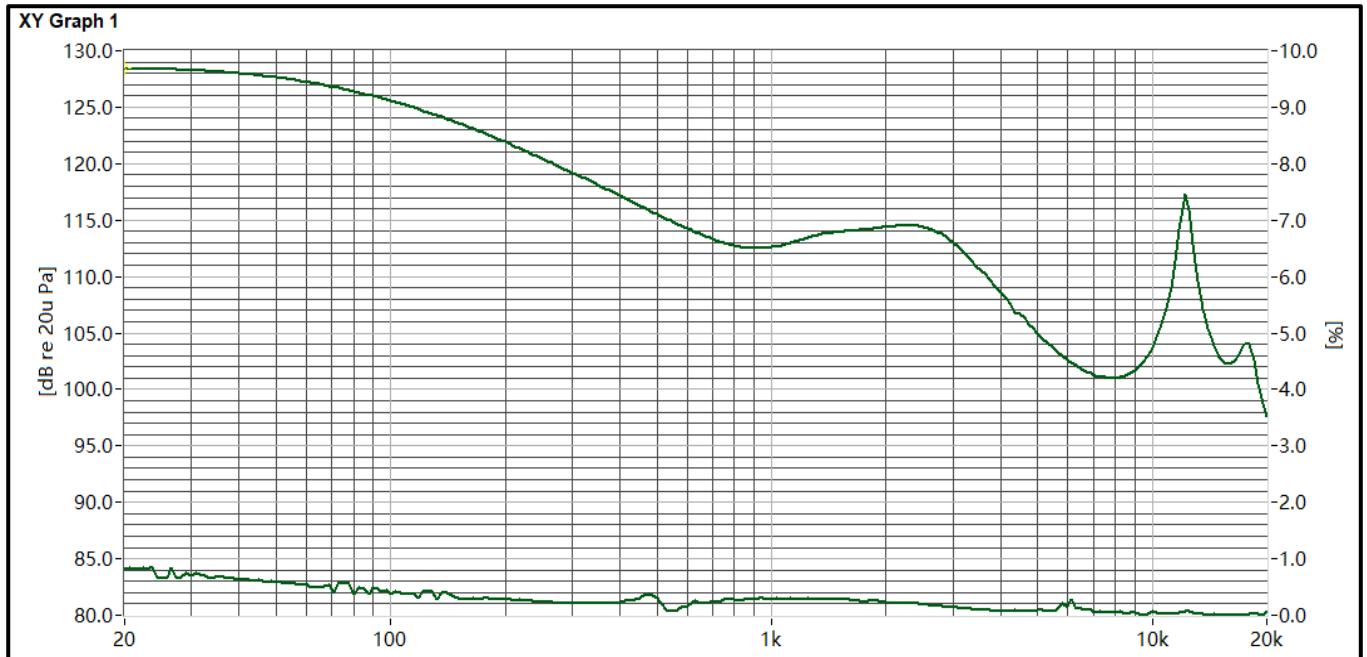


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## 8. STANDARD FREQUENCY RESPONSE CURVE & STANDARD THD

Test input 0.179V, IEC60318-4, 1/6oct (Fig.3)



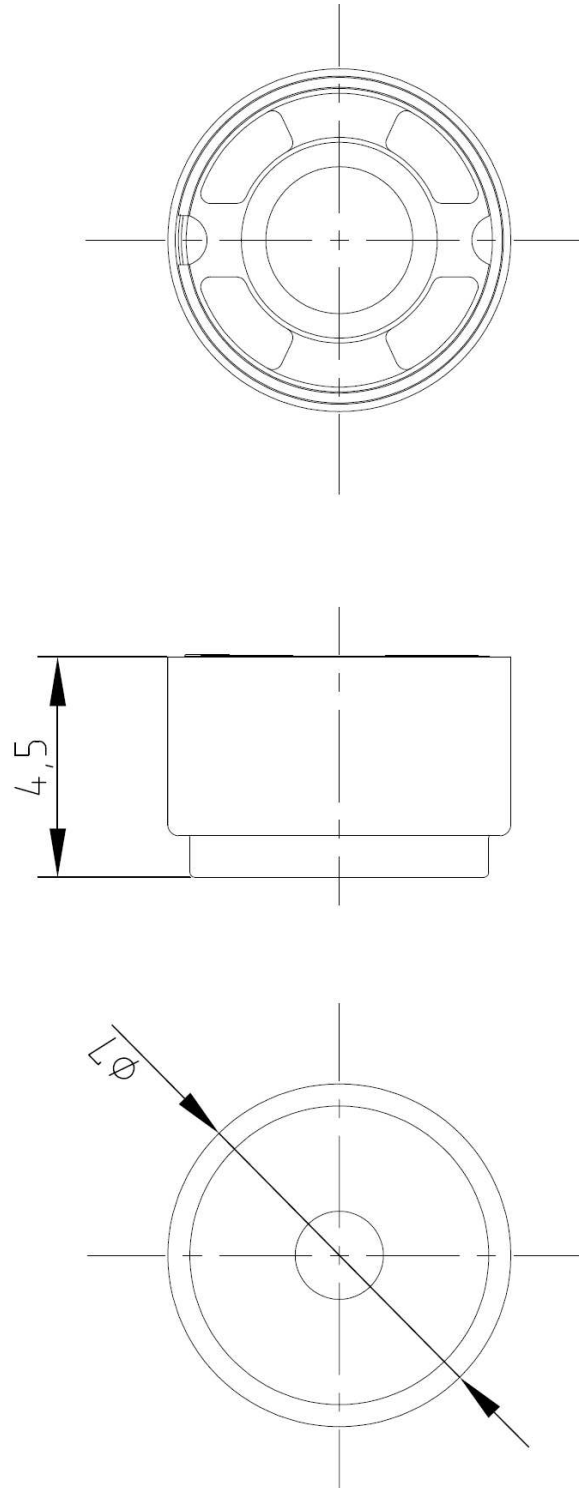
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## 9. DIMENSION (Fig.4)

Unit: mm

Tolerance: +/-0.2



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**11. Marking (TBD)**

**12. Packing (TBD)**

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