

# APPROVAL SHEET

**Model No.** : NS14M-30005-01

**Only No.** :

**Date** :

**Description** : Planar Drivers

APPROVER	CHECKER	DESIGN
Zhang YongFei	Huang XianBi	Liang Xue Tao

Please kindly make approval of our samples, And return this form by fax or airmail, Thanks for your kind attention and co-operation.

**Customer Name** :

**Customer Model No.** :

**Customer Project No.** :

## CUSTOMER APPROVAL

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**Acoustic Specifications**

声学规格书

Product Part Number 产品编号: NS14M-30005-01

Product Picture 产品图片



**Revision Record 修订记录**

No. 序号	Date 日期	Description 修订原因	Revision 版本	Acoustics Engineer 声学工程师
1	2023-06-28	新版发布	1.0	Liang Xue Tao

Sample Number 样品流水号:

Datasheet Version 规格书版本: Ver 3.4



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# SPEAKER SPECIFICATION

## 1.SCOPE

This specification covers electrical and mechanical requirements for the planar loudspeaker

## 2. TEST CONDITIONS

TEMPERATURE : 18°C ~ 25°C

HUMIDITY : 65% ±5% (R.H.)

ATMOSPHERE : 860 ~ 1060 hPa3.

## 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.8

NET WEIGHT: 2.0g±10%

ELECTRO-ACOUSTICAL CHARACTERISTICS:Test condition(Ta=20°C, RH=65%)

1	DC Resistance	30Ω ± 15%
2	Sound Pressure Level on IEC 318 coupler	107±2 dB at 1000Hz 0.173V Measure setup as shown in Fig.1
3	Frequency response	20~20K Hz
4	Frequency response on IEC 318 coupler	Typical performance as shown in Fig.3. (Test input 0.173V)
5	Total Harmonic Distortion on IEC 318 coupler	Less than 1% at 1KHz 0.173V
6	Input Power	(Nom./Max.): 5mW /10mW
7	Rub & Buzz	Speaker must be free of audible noise at 0.39v sine wave between 20Hz-20KHz

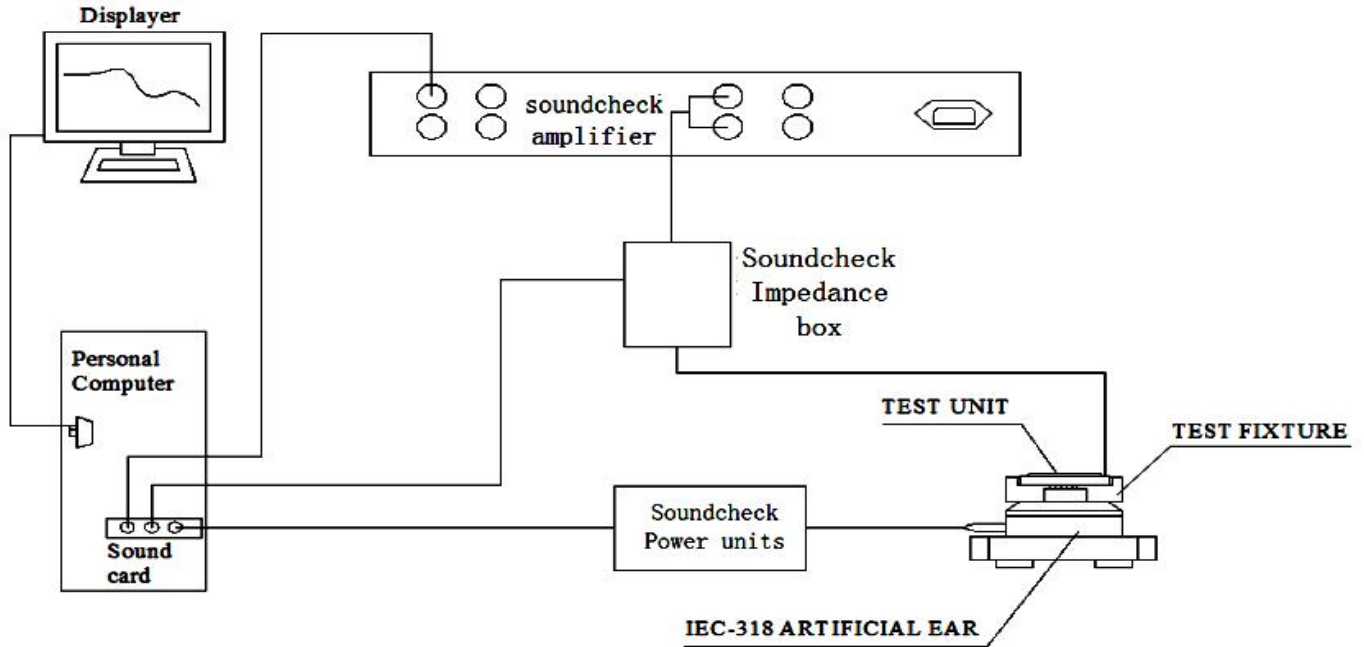


**5. RELIABILITY TEST REQUIREMENTS**

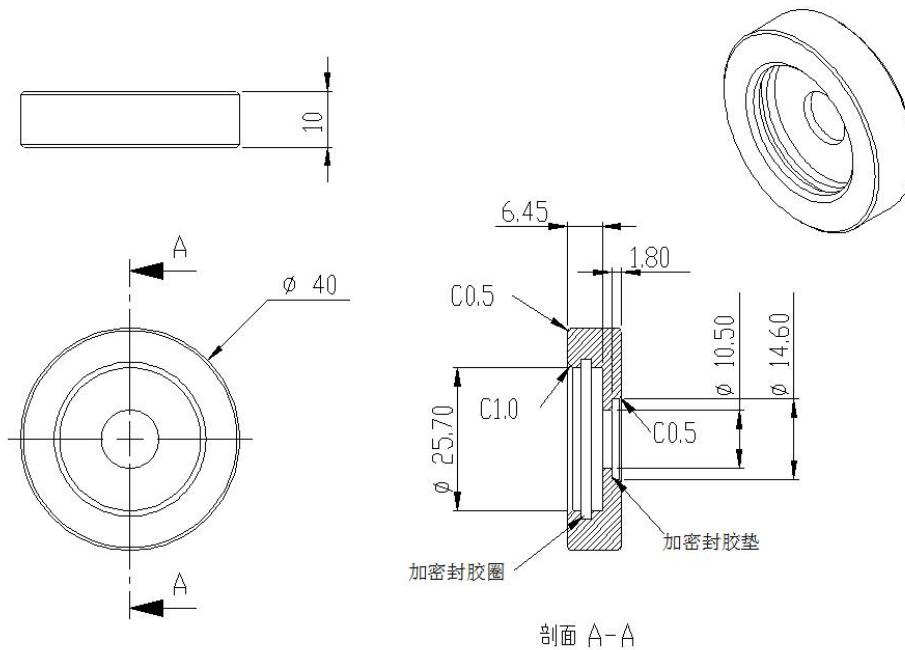
Sensitivity difference at 1000Hz shall be within $\pm 2$ dB from initial value after each test. Sensitivity measurement is to be done 2 hours after each test.		
No.	ITEMS	TEST CONDITION
1	HIGH TEMPERATURE TEST STORAGE	Temperature 70 $\pm$ 3° C Duration 96hrs
2	LOW TEMPERATURE TEST STORAGE	Temperature -40 $\pm$ 3° C Duration 96hrs
3	HIGH TEMPERATURE HUMIDITY TEST	Temperature 40 $\pm$ 3° C Humidity 90%-95%(RH) Duration 96hrs
4	DROP TEST	Height With protector grill 1.5m to concrete Position 3 edges Total times 6 times
5	TEMPERATURE CYCLE TEST	-40°C/2 hours +25°C/1 hours +70°C/2 hours +25°C/1 hours Cycles 10 cycles
6	VIBRATION TEST	vibrational frequency:10~50 Hz/1min Amplitude:1.52mm 1.52mm:3 directions Duration:2 hours
7	LODA TEST	Input power:5mW Test signal:White noise Duration:96 hours

**6. TEST SETUP AND TEST JIG FOR IEC 318 COUPLER**

**6.1 IEC 318 MEASUREMENT CIRCUIT FOR DYNAMIC SPEAKER (Fig.1)**

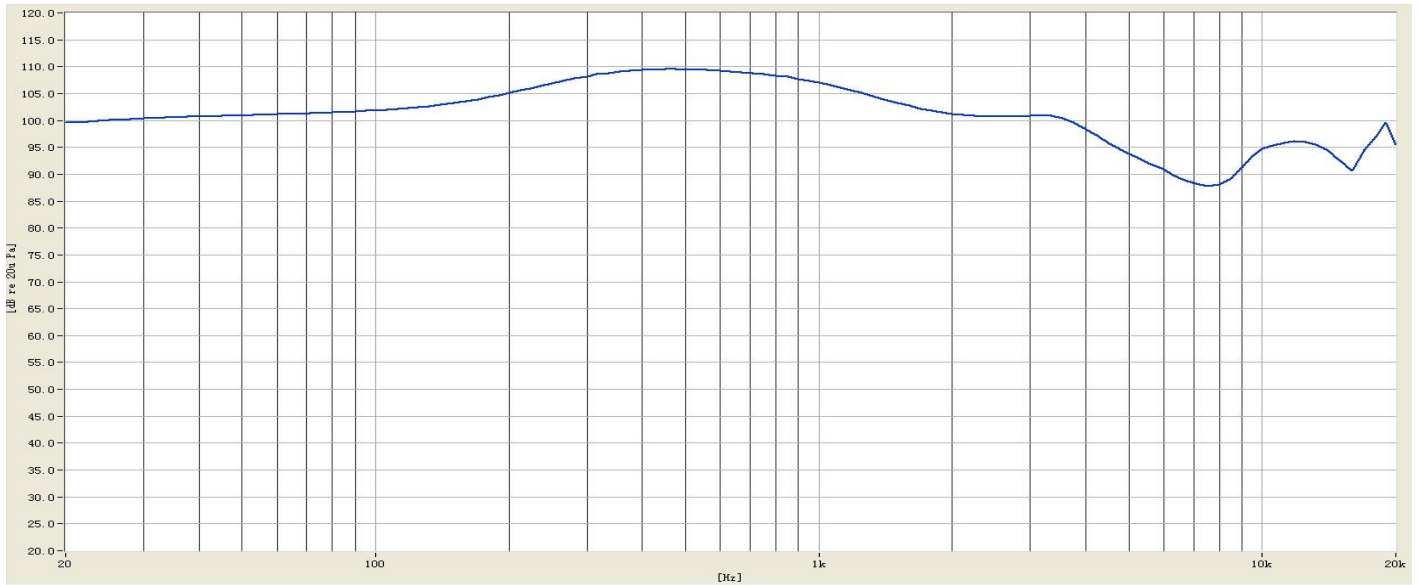


**6.2 IEC 318 TEST JIG(Fig2)**



**7. Standard Frequency Response Curve & Standard THD (Fig.3)**

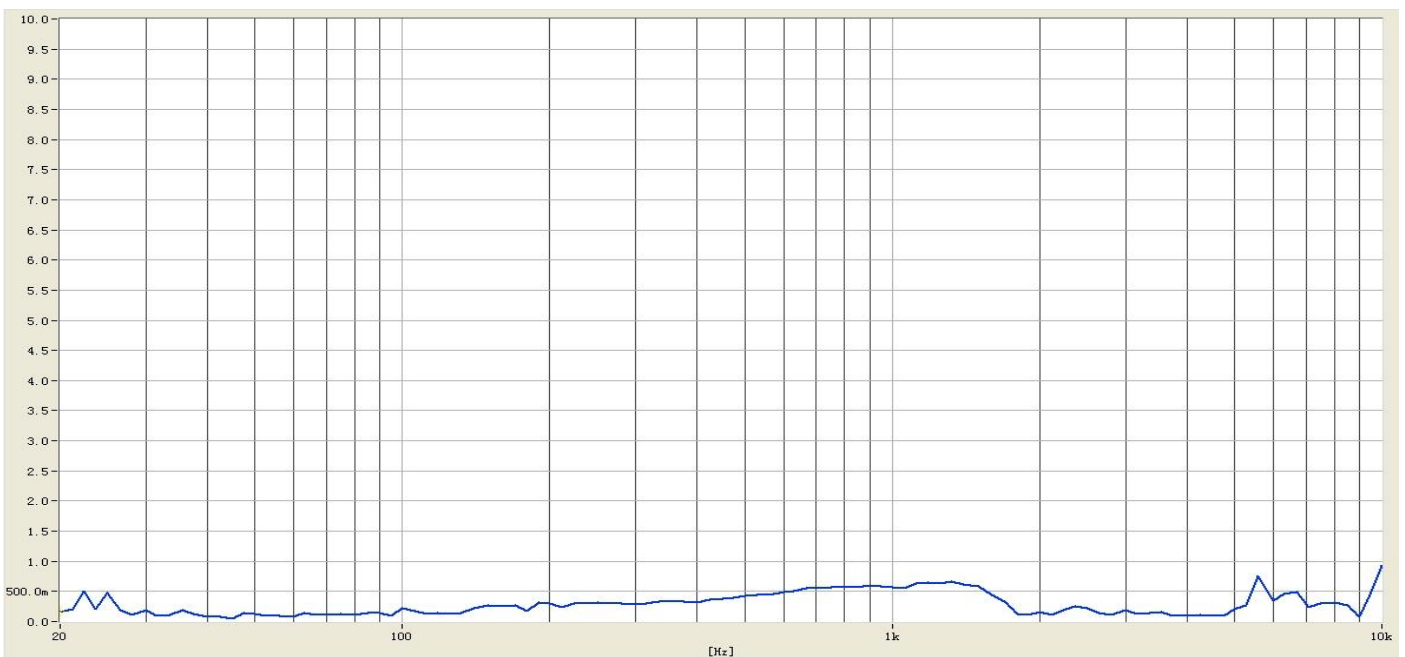
**7.1 Frequency response curve**



曲线框线设定标准（测试倍频 1/6Oct） Curve frame line setting standard

频率 (Hz)	20	400	500	1000	2000	3000	4000	5000
上限 (dB)	+2.5	+2.5	+2	+2	+2.5	+2.5	+3.5	+3.5
下限 (dB)	-2.5	-2.5	-2	-2	-2.5	-2.5	-3.5	-3.5

**7.2 Total harmonic distortion frequency sweep test (0.173V 20-10kHz)**



## 8.DIMENSION (Fig.4)

Unit: mm

Tolerance: +/-0.2

