



SPECIFICATION

CUSTOMER:

PRODUCTS : MICRO SPEAKER

MODEL :XHS150702LN-01-RH

ITEM. NO. :

DATE :2022-5-15



APPROVER	CHECKER	DESIGNER

CUSTOMER APPROVER

SIGNATURE	IMPRINTMENT

ZHEJIANG HAOSHENG ELECTRONIC TECHNOLOGY CO.,LTD.

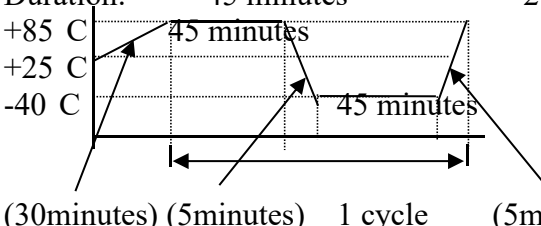
Add: HaoSheng Technology Building,NO.328,Huimin, Jiashan,Zhejiang,P.R.China
314112

TEL:86-573-84645930 84646197

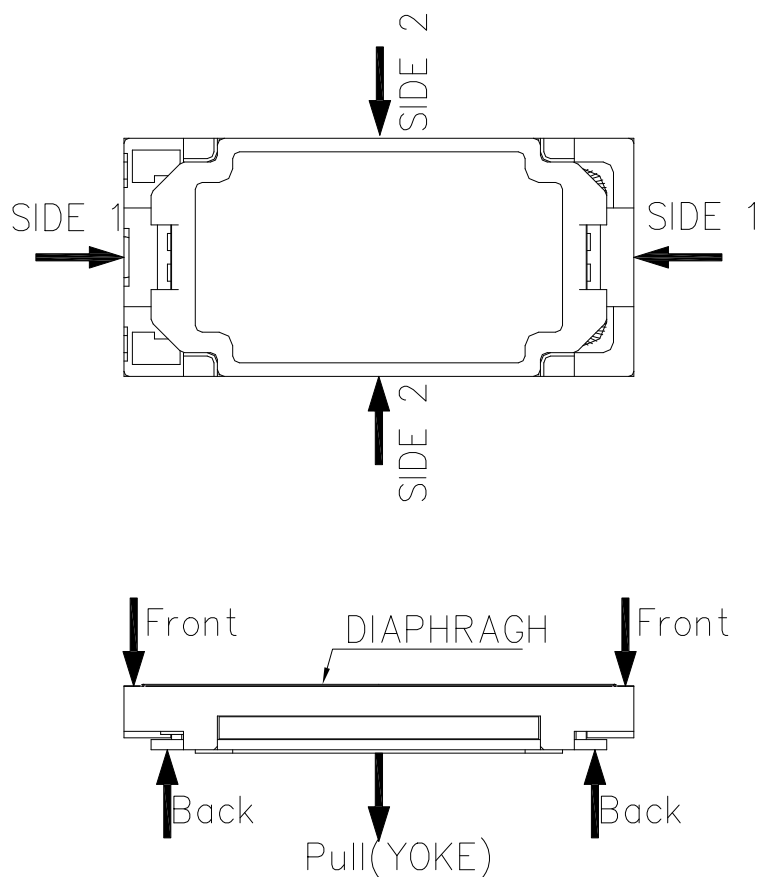
Fax:86-573-84646190

E-mail: services@xh-haosheng.com.

ZHEJIANG ELECTRONIC CO.,LTD. TEL:86-573-84645930 、 84646197 FAX:86-573-84646190 E-mail: services@xh-haosheng.com.	HAOSHENG TECHNOLOGY		SPECIFICATIONS (2/9)	
	TYPE NO.	XHS150702LN-01-RH	Issue:A/1	
1. Product Outline				
1-1. Scope		This specification is a typical speaker unit for telephone handset		
1-2. Dimensions		As shown in figure 1		
1-3. Net Weight		Approx 0.8 grams		
1-4. Operating Temperature Range		-30°C to +70°C without loss of function		
1-5. Storage Temperature Range		-40°C to +85°C (Note: Return to ambient room temperature before using)		
2. Electroacoustic Characteristics				
2-1. Test Setup		Measuring instrument as shown in Figure 3		
2-2. Impedance		DC: 10 10% ohm AC: 12 15% ohm (at 4 KHz, 3.46V input)		
2-3.Sound Pressure Level		101 2 dB@4kHz, 3.46Vrms in 0.12cc, 10cm baffle Speaker shall be mounted in a baffle with minimum dimensions of 80cm x 100cm. See Figure 4.		
0.62-4.Frequency Response		See Figure 5, Table 2 Test at 3.46V /10 cm with the speaker mounted in 0.12cc measure box in a baffle.		
2-5.Bass Resonance Frequency		2800 10% Hz in 0.12cc box input 3.46Vrms		
2-6. Iput Power (Rated.)		Rated Power: 1.0W (in 0.12cc box)		
2-7.THD		See Figure 6 , Table 3 Test at 3.46V/10cm with the speaker mounted in 0.12cc measure box in a baffle.		
2-12.Rub and Buzz:		The input power shall be set at 1.0W(3.46Vrms). Using an audio oscillator, sweep from 2k to 10kHz with the speaker mounted in 0.12cc measure box and in a baffle.There shall be no buzzes, rattles, nor spurious noises.		
2-13.Polarity		When a DC source’s “+” polarity is attached to speaker’s “+” polarity,“-“ polarity is attached speaker’s “-“ polarity ,the membrane will move forward .		

ZHEJIANG ELECTRONIC CO.,LTD. HAOSHENG TECHNOLOGY TEL:86-573-84645930 、 84646197 FAX:86-573-84646190 E-mail: services@xh-haosheng.com.	SPECIFICATIONS (3/9)		
	TYPE NO.	XHS150702LN-01-RH	Issue:A/1
3. General Reliability			
3.1 General	After any following tests the response at 4 KHz shall not deviate more than 2 dB from the initial value		
3.2 Temperature Shock Test	Temperature: -40 3 C ↔ +85 3 C Cycle: 12 cycles Duration: 45 minutes 2 hours (recovery 2 hours)  (30minutes) (5minutes) 1 cycle (5minutes)		
3.3 Static Humidity Test	Temperature: +40 C 3 C Relative Humidity: 90%~95%RH Duration: 96 hours (recovery 6 hours)		
3.4 Vibration Test	Secure device using a fixture appropriate for this test. Fixture shall be capable of mounting on vibration table. Vibrate from 10Hz to 2000Hz, 1 octave per minute, 2mm displacement ±x, ±y, ±z directions with 15 g's force for 2 hrs per each plane.		
3.5 Drop Test	Height: 1.5m Cycle: 1 cycles drop samples 1.5m 2 drops on side(2*6), 2 drops on each corner(2*4). Total 20 drops		
3.6 Operating Life Test	25℃;Pink noise;2kHz-10KHz;1.0W 0.12cc;Crest factor 2;96 H		
3.7 High Temperature Test	85 +/-3℃;96H;2H Recovery time		
3.8 Low Temperature Test	-40 +/-3℃;96H;2H Recovery time		

4.2 Permitted Force to Speaker



(Figure 2)

Table 1: Max. Permitted compression forces

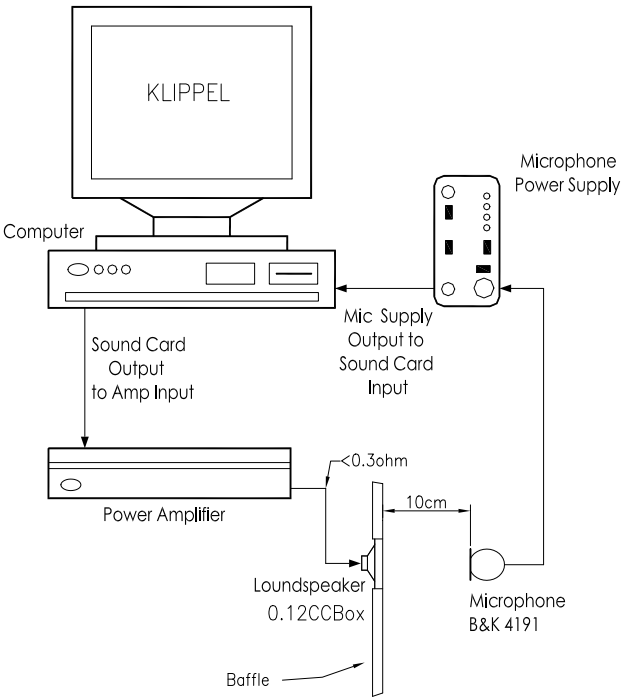
NO.	From	To	Max. Permanent Force(N)
1	Side 1	Side 1	10N
2	Side 2	Side 2	10N
3	Front	Back	5N
4	To Diaphragm		0N
5	Pull of Force(Yoke)		0N

TYPE NO.

XHS150702LN-01-RH

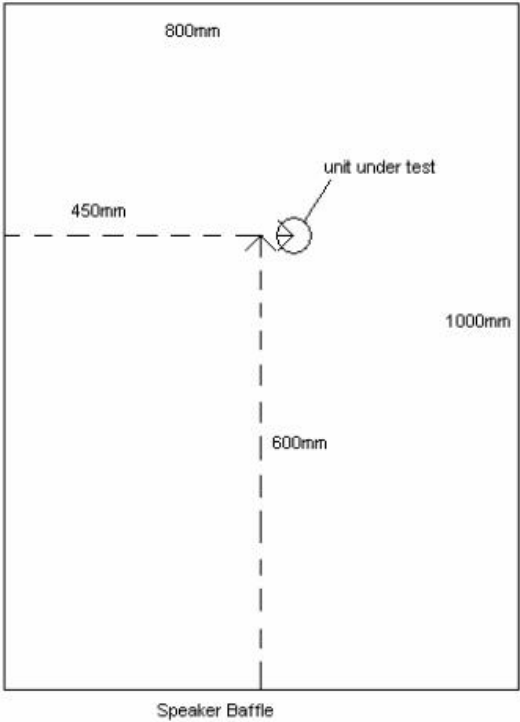
Issue:A/1

5. Measuring Setup



(Figure 3)

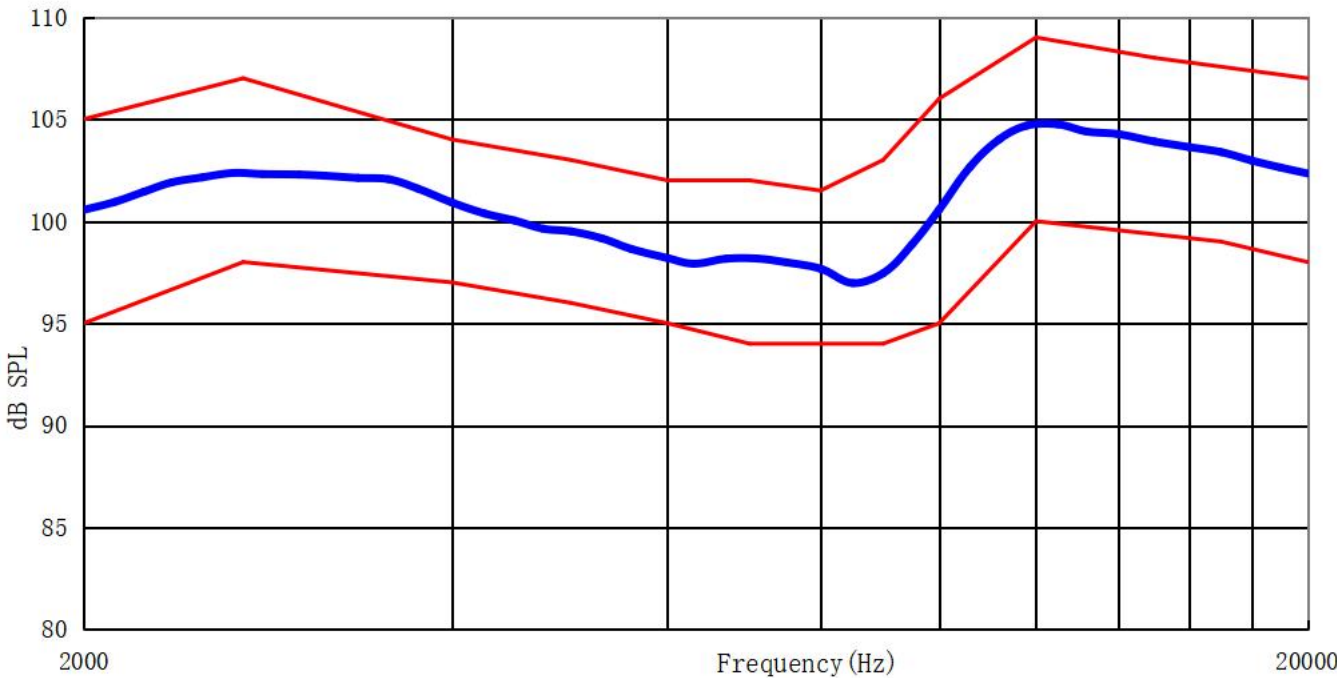
Baffle



(Figure 4)

6. Frequency Response

SPL 3.46V/10cm/0.12cc in baffle klippel



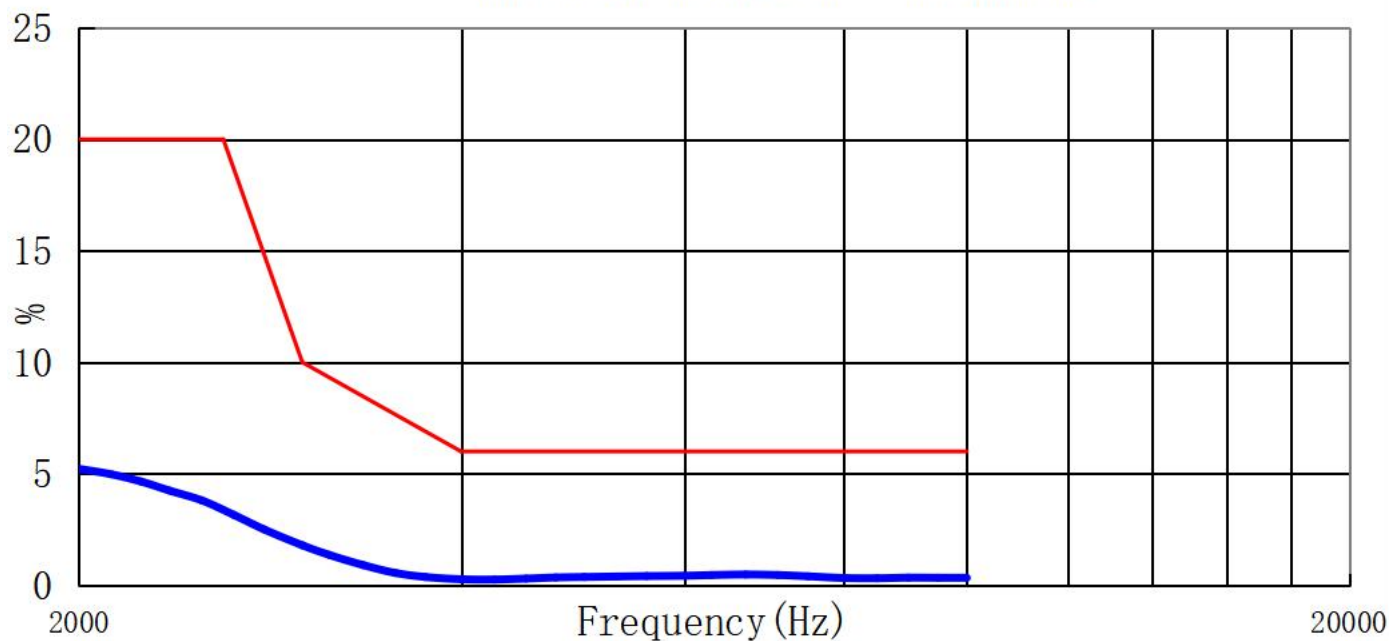
(Figure 5)

Table 2: Limits for SPL

Frequency	Upper limit	Frequency	Lower limit
2000	105	2000	95
2700	107	2700	98
4000	104	4000	97
5000	103	5000	96
6000	102	6000	95
7000	102	7000	94
8000	101.5	8000	94
9000	103	9000	94
10000	106	10000	95
12000	109	12000	100
15000	108	17000	99
20000	107	20000	98

7. Total Harmonic Distortion

THD 3.46V-10cm/0.12cc in baffle



(Figure 6)

Table 3: Limits for THD

Frequency	Limit(%)
2000	20
2600	20
3000	10
4000	6
10000	6

SPECIFICATIONS
(9/9)

TYPE NO.

XHS150702LN-01-RH

Issue:A/1

8.TS

TS 参数	
Re (ohms)	10.05
Le (mH)	0.014
BL (N/A)	0.5
DO (mm)	0.96
Mm (g)	0.017
Cm (mm/N)	0.535
Rm (mech ohms)	0.118
F0 (Hz)	1661.1
Qms	1.512
Vas (l)	0.0004
Xmax (mm)	0.1
Sd (mm ²)	0.72
vol disp. (mm ³)	0.072
Tmax (°)	110
Tcoeff	0.00382