



SPECIFICATION

CUSTOMER:

PRODUCTS : MICRO SPEAKER

MODEL : XHS171236LN-01-RH

ITEM. NO. :

DATE : 2021-9-13



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

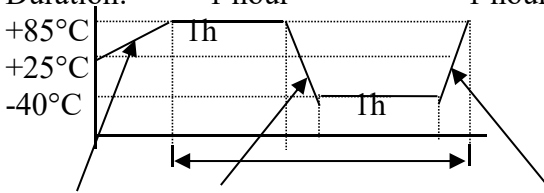
TEL:86-573-84645930 84646197

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 (1/11)		
		TYPE NO.	XHS171236LN-01-RH	Issue:A/0
Revision				
No	Date	Page	Description	Sign
Table of Contents				
No.	Item			Page
1	Product Outline			2/11
2	Electroacoustic Characteristics			2/11
3	General Reliability			3/11
4	Mechanical Layout and Dimensions			4,5,6/11
5	Measuring Setup			7/11
6	Frequency Response			8/11
7	Total Harmonic Distortion			9/11
8	R&B			10/11
9	T/S Parameters			11/11

ZHEJIANG ELECTRONIC CO.,LTD. TEL:86-573-84645930 、 84646197 FAX:86-573-84646190 E-mail: services@xh-haosheng.com.	HAOSHENG TECHNOLOGY	SPECIFICATIONS (2/11)		
		TYPE NO.	XHS171236LN-01-RH	Issue:A/0
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 1.36 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 4		
2-2. DC resistance		6.8±10% ohm		
2-3. Impedance		8 ± 15% ohm （ at 2.5 KHz, 2.83V input ）		
2-4.Sound Pressure Level		94 ± 2 dB SPL /1.0W/10cm at 2 kHz in 0.7cc box Speaker shall be mounted in a baffle with minimum dimensions of 80cm x 100cm. See Figure 5.		
2-5.Frequency Response		See Figure 6 Test at 1.0W/10 cm with the speaker mounted in 0.7cc measure box in a baffle.		
2-6.Bass Resonance Frequency		870±15% Hz in 0.7cc box		
2-7. Iput Power (Rated./Max.)		Rated Power: 1.0W (in 0.7cc box) Maximum Power: 1.5W (in 0.7cc box)		
2-8.Rub and Buzz:		The input power shall be set at 1.0W. Using an audio oscillator, sweep from 500 to 6000 Hz with the speaker mounted in 0.7cc measure box and in a baffle.There shall be no buzzes, rattles, nor spurious noises.		
2-9.THD		See Figure 7 Test at 1.0W/10 cm with the speaker mounted in 0.7cc measure box in a baffle.		
2-10.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 (3/11)		
		TYPE NO.	XHS171236LN-01-RH	Issue:A/0
3. General Reliability				
3-1 General		After any following tests the response at 1 KHz shall not deviate more than ±3 dB from the initial value		
3-2 Temperature Shock Test		Temperature: -40°±3°C↔+85°±3°C Cycle: 10 cycles Duration: 1 hour 1 hour (recovery 2 hours)  (30minutes) (5minutes) 1 cycle (5minutes)		
3-3 Static Humidity Test		Precondition at +25°C for 1 hour. Next expose samples to +55°C with 95% relative humidity for 96 hours with no bias. Finally allow test samples to dry at room ambient temperature for 3 ± 1 hour before taking final measurements.		
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		Drop samples 1.5 meters three times in each direction along each of the three mutually perpendicular axes for a total of 18 shocks.(Samples shall be mounted in a 100g fixture)		
3-6 Operating Life Test		0.7cc box;25°C;Pink noise;20Hz-20kHz;1.0W;Crest factor 1.8-2.2;96 H		
3-7 Rated Sweep Power Test		0.7cc box;25°C;Rated Power(1.0W);700-1100Hz; 1 sec;12 H		
3-8 Max Power Test		0.7cc box;25 °C ;Pink noise;20Hz-20kHz;1.5W;1 sec on/60 sec off;60 cycles		
3-9 High Temperature Test		85 +/-2°C;96H;2H Recovery time		
3-10 Low Temperature Test		-40 +/-2°C;96H;2H Recovery time		

**ZHEJIANG HAOSHENG
ELECTRONIC TECHNOLOGY
CO.,LTD.**

TEL:86-573-84645930 、 84646197

FAX:86-573-84646190

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

SPECIFICATIONS (4/11)

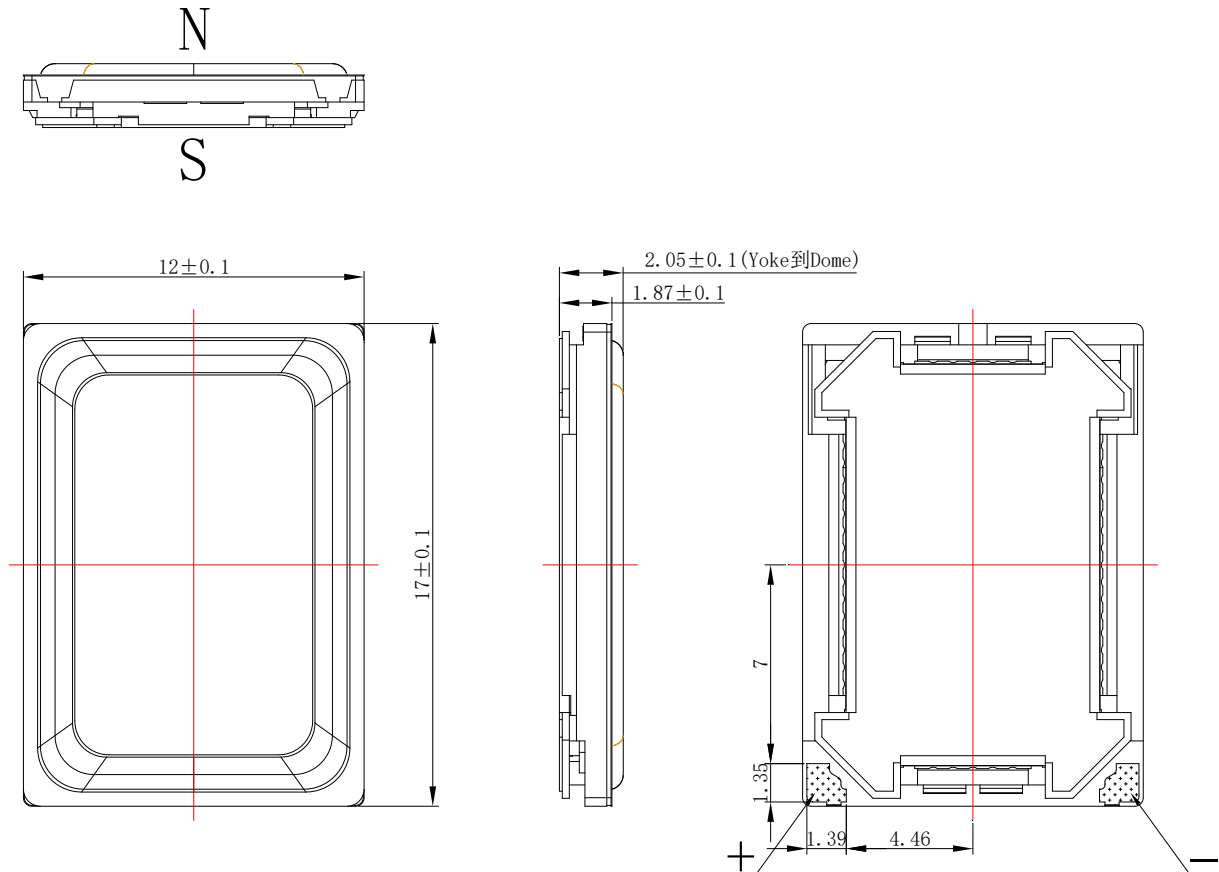
TYPE NO.

XHS171236LN-01-RH

Issue:A/0

4. Mechanical Layout and Dimensions

4.1 Mechanical Layout



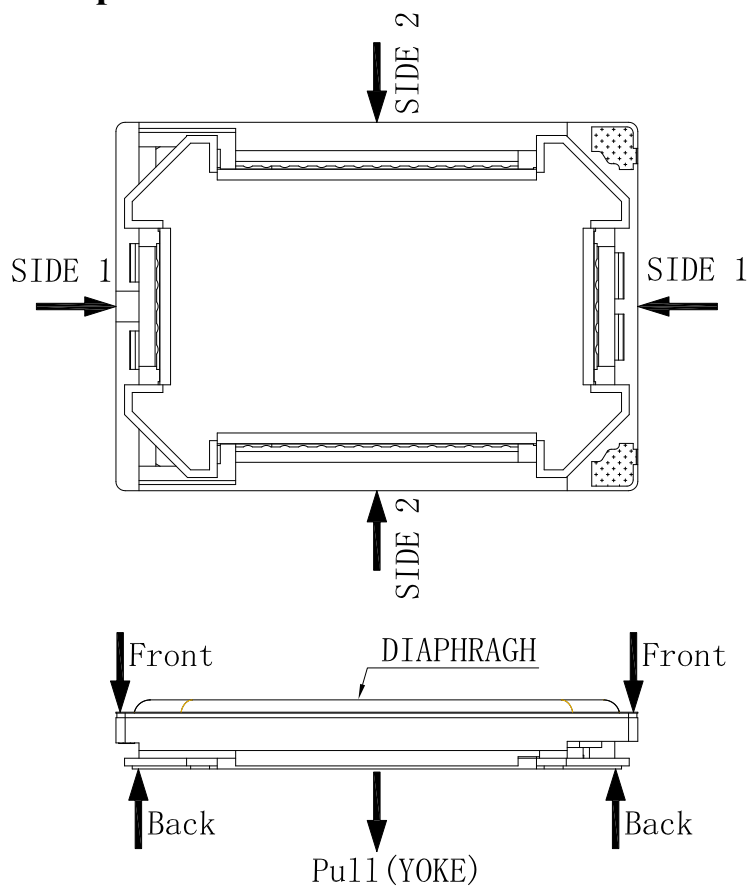
Notes:

1、 General unless otherwise noted $\pm 0.15\text{mm}$.

(Figure 1)

8	Pad	SUS	2	
7	Voice Coil	Copper	1	
6	Diaphragm	Polymer	1	
5	Dome Type	PMI	1	
4	Pole Piece	Iron	1	
3	Magnet	NdFeB	1	
2	Yoke	Iron	1	
1	Frame	Plastic	1	
No.	Part Name	Material	Q'TY	Remark

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

**ZHEJIANG
ELECTRONIC
CO.,LTD.**

**HAOSHENG
TECHNOLOGY**

TEL:86-573-84645930 、 84646197

FAX:86-573-84646190

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

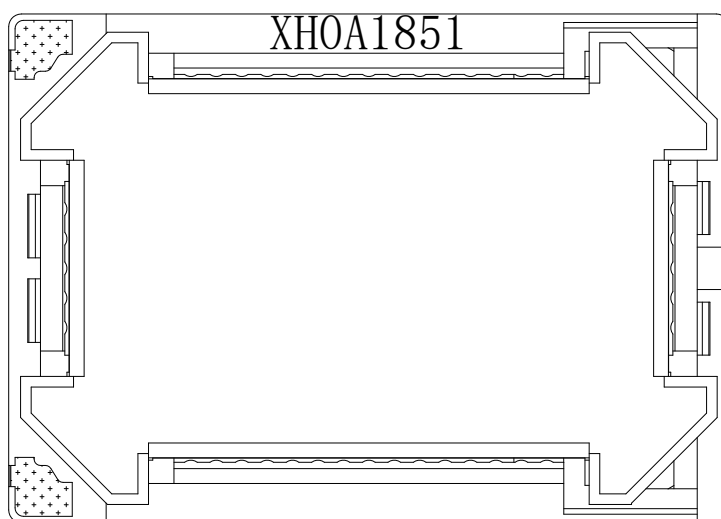
SPECIFICATIONS **(6/11)**

TYPE NO.

XHS171236LN-01-RH

Issue:A/0

4.3 Date Code



印字描述Description of the digital:

XH:公司名称缩写Company name abbreviation

0:年Year (2020:0, 2021:1, 2022:2...)

A:月Month (01, 02, 03, ... 12)

18:日Day (01, 02, 03, ... 31)

5:自动线Autoline

1:线别Line (1, 2, ...)

(Figure 3)

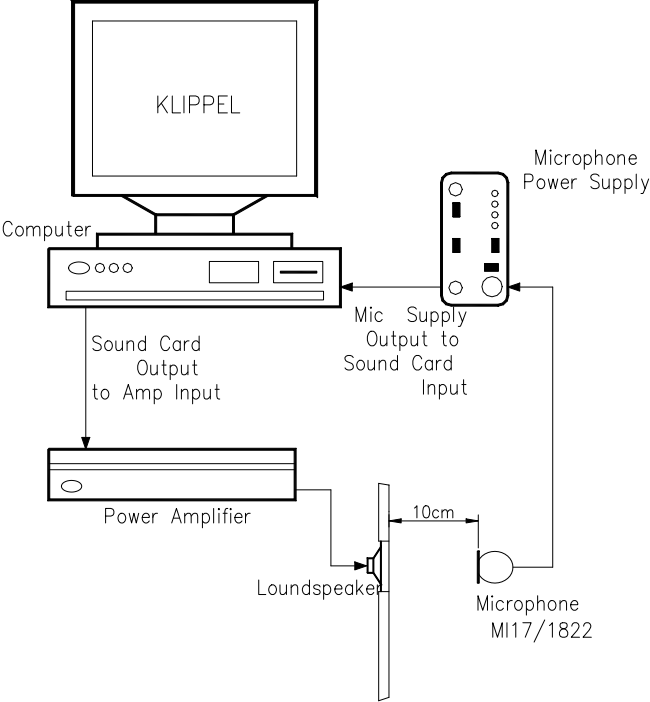
SPECIFICATIONS
(7/11)

**TYPE
NO.**

XHS171236LN-01-RH

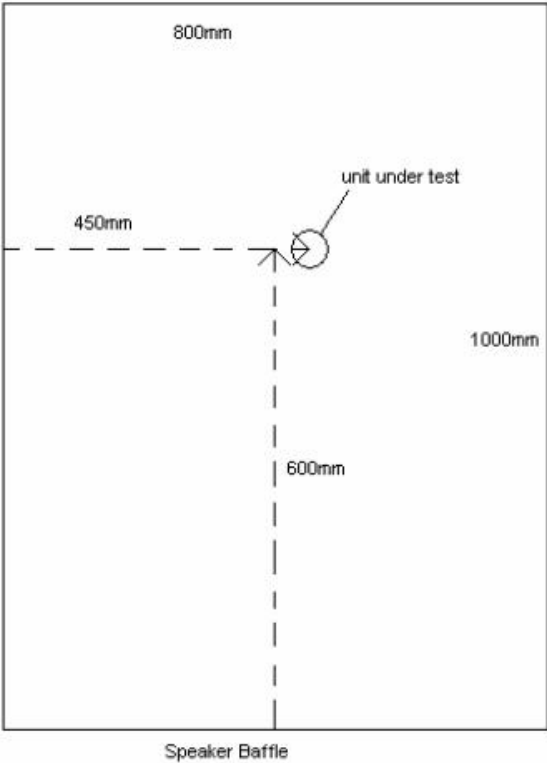
Issue:A/0

5. Measuring Setup



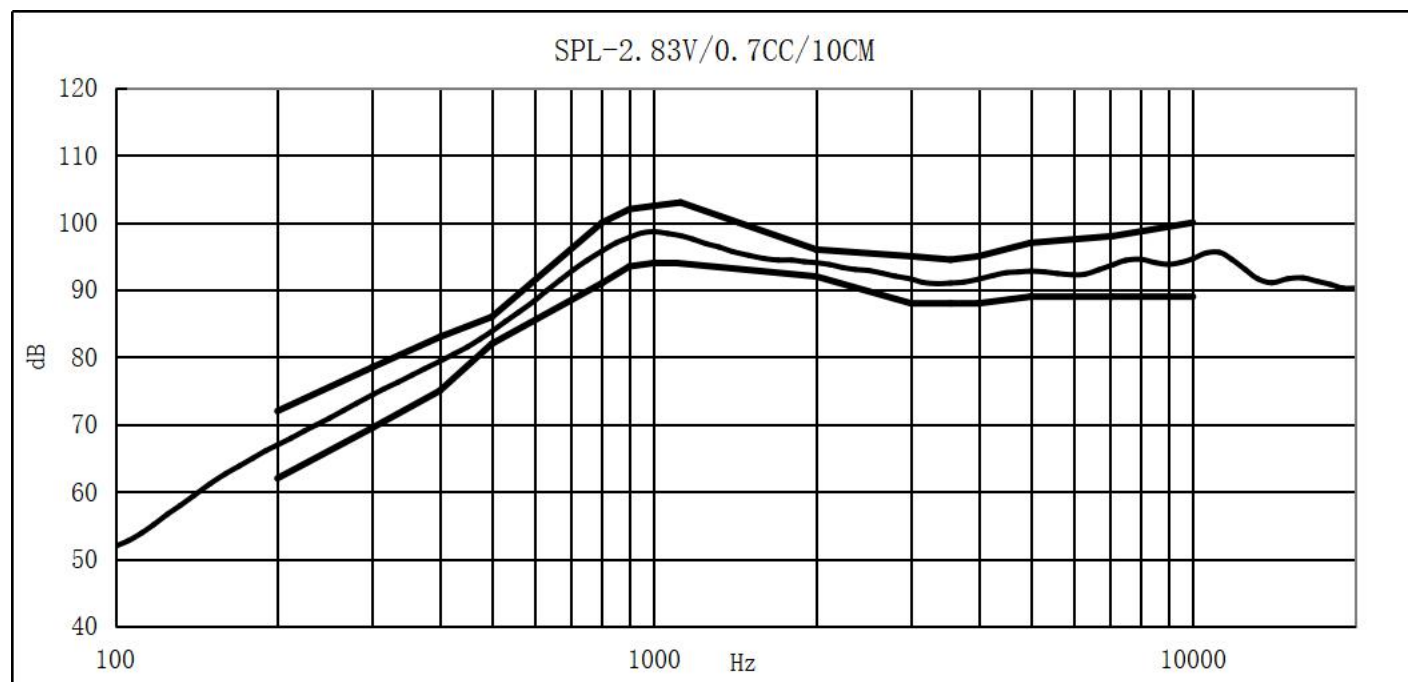
(Figure 4)

Baffle



(Figure 5)

6. Frequency Response

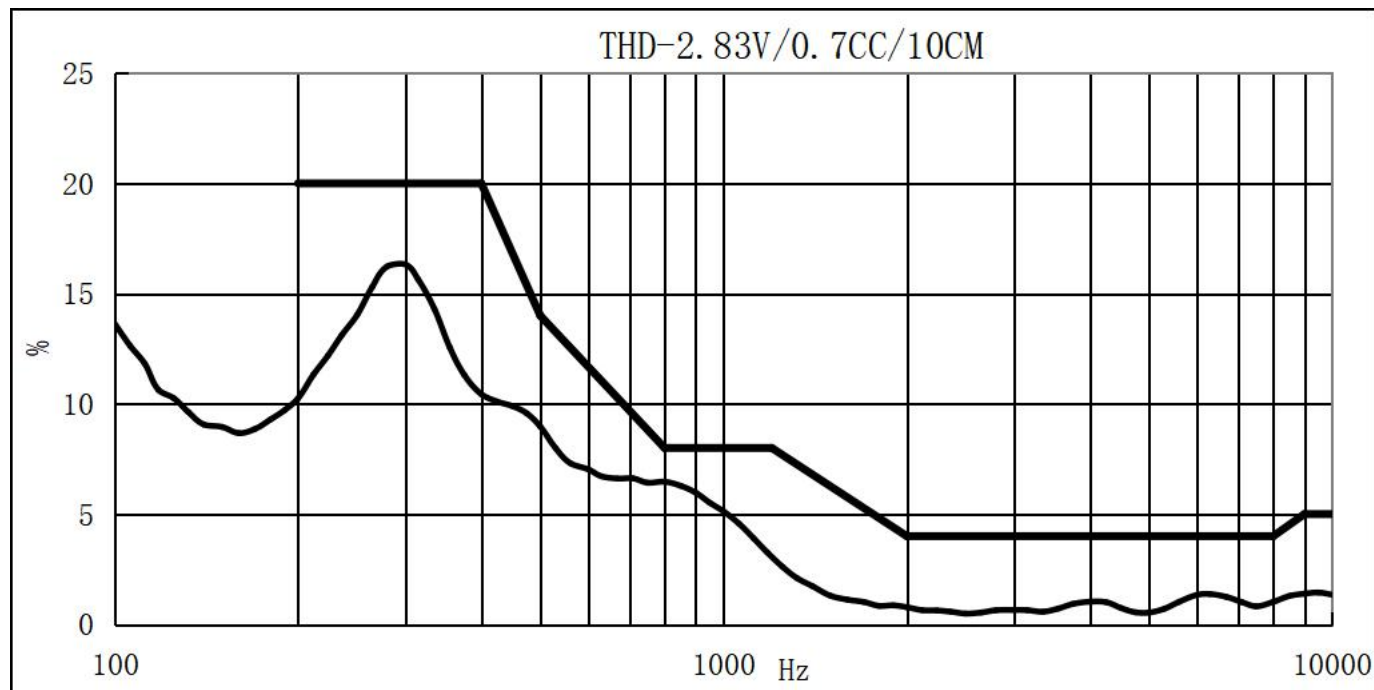


(Figure 6)

Table 2:Tolerance Limits Data for FR

Frequency (Hz)	Upper Limit (dB)	Frequency (Hz)	Lower Limit (dB)
200	72	200	62
300	78.5	300	69.5
400	83	400	75
500	86	500	82
800	100	800	91
900	102	900	93.5
1000	102.5	1000	94
1120	103	1100	94
2000	96	2000	92
3000	95	3000	88
3550	94.5	3550	88
4000	95	4000	88
5000	97	5000	89
7100	98	7100	89
10000	100	10000	89

7. Total Harmonic Distortion

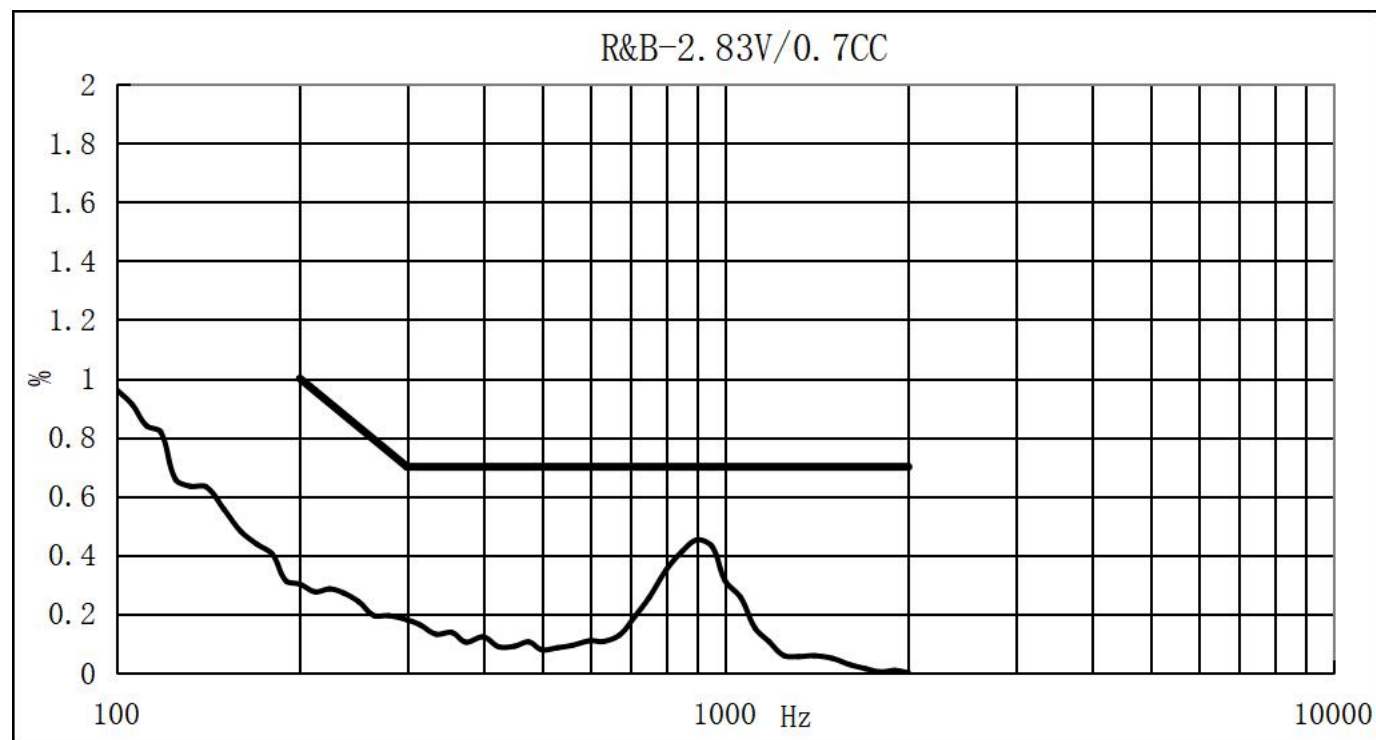


(Figure 7)

Table 3: Limits Date for THD

Frequency (Hz)	Limits
200	20
400	20
500	14
800	8
1200	8
2000	4
8000	4
9000	5
10000	5

8.R&B



(Figure 8)

Table 4: Limits Date for R&B

Frequency(Hz)	Limits
200	1
300	0.7
2000	0.7

**SPECIFICATIONS
(11/11)**

TYPE NO.

XHS171236LN-01-RH

Issue:A/0

9. T/S Parameters

TS 参数	XHS171236LN-01-RH
Re (ohms)	6. 62
Le (mH)	0. 043
BL (N/A)	0. 754
DO (mm)	13. 35
Mm (g)	0. 108
Cm (mm/N)	1. 475
Rm (mech ohms)	0. 101
F0 (Hz)	399. 1
Qms	2. 666
Vas (l)	0. 0041
Xmax (mm)	0. 3
Sd (mm ²)	140
vol disp. (mm ³)	42
Tmax (°)	100
Tcoeff	0. 00357