SPECIFICATION FOR APPROVAL

承 认 书

Customer （客户） ：_____

Product Name（产品名称）：微型扬声器(多媒体)

Zhenmei Part No.(臻美型号)：MID1609A-H3.3-8B07-01

Specification（臻美规格）：8Ω 1W

Customer’s Model No.（客户型号）：_____

Specification No.（规格书编号）：DYS-1609A-H3.3-8B19

Number of the edition（版本号）：A0

CUSTOMER’S APPROVED SIGNATURE 客户承认盖章		

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zhen mei smart electronics

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Approved by 核准	Checked by 审核	Issued by 制成

版本变动记录 REVISION HISTORY

NO.	Revision	Date	Model No.	Spec No.	Remark
1.	1.0	2018.1.05	Established 建立	V1.0	

1. 简介 SCOPE

本产品适用于电脑、手机、对讲机等安防领域产品

This product is suitable for computer, mobile phone, walkie talkie and other security products

2.外观尺寸图 MECHANICAL LAYOUT & DIMENSIONS

见图 Shown in Fig.4

3.概要 GENERAL REQUIREMENTS

3.1 使用温度 OPERATING TEMPERATURE RANGE: -20℃ ~ +60℃

3.2 储存温度 Storage Temperature: -30℃ ~ +70℃

3.3 标准测试条件 STANDARD TEST CONDITIONS:

温度 Temperature: 17～25℃ 湿度 Relative Humidity: 45%～80%(RH)

大气压力 Air Pressure: 860～1060 MPa

3.4 仲裁测试条件 JUDGEMENT CONDITIONS:

温度 Temperature: 20±2℃ 湿度 Relative Humidity: 60%～70%(RH)

大气压力 Air Pressure: 860～1060 MPa

4. 扬声器规格 SPEAK ELECTRICAL AND ACOUSTICAL SPECIFICATION

4.1 声压级 Sound Press Level（SPL）： 89± 3 dB SPL /2.36V/10CM at 2000Hz,in 1cc box

4.2 阻抗 IMPEDANCE： 8±15% Ω

4.3 频响曲线 FREQUENCY RESPONSE CURVE: As shown in fig(2)

4.4 谐振频率 RESONANCE FREQUENCY:800±20%Hz in free air, 1100±20%Hz in 1CC box.

4.5 额定功率 Rated Power： 0.7W in1CC box

4.6 最大功率 Max. Power:1.0W must be normal white noise for 1 minute in 1.0cc box

4.7 谐波失真 DISTORTION ：10% Max. 2kHz(Mounted in 1cc measure box and in a baffle) Test at 2Vrms/10cm fig (3)

4.8 纯音检听 AUDIBLE NOISE： Must be free audible noise 300Hz ~ 10KHz; 2.0Vrms, while testing in 1cc box.

4.9 极性 POLARITY: Right side is the “+”, As show in the picture

4.10 重量 Weight： Approx. 1.2g

■测试方法图 **MEASURING CIRCUIT (Fig.1)**

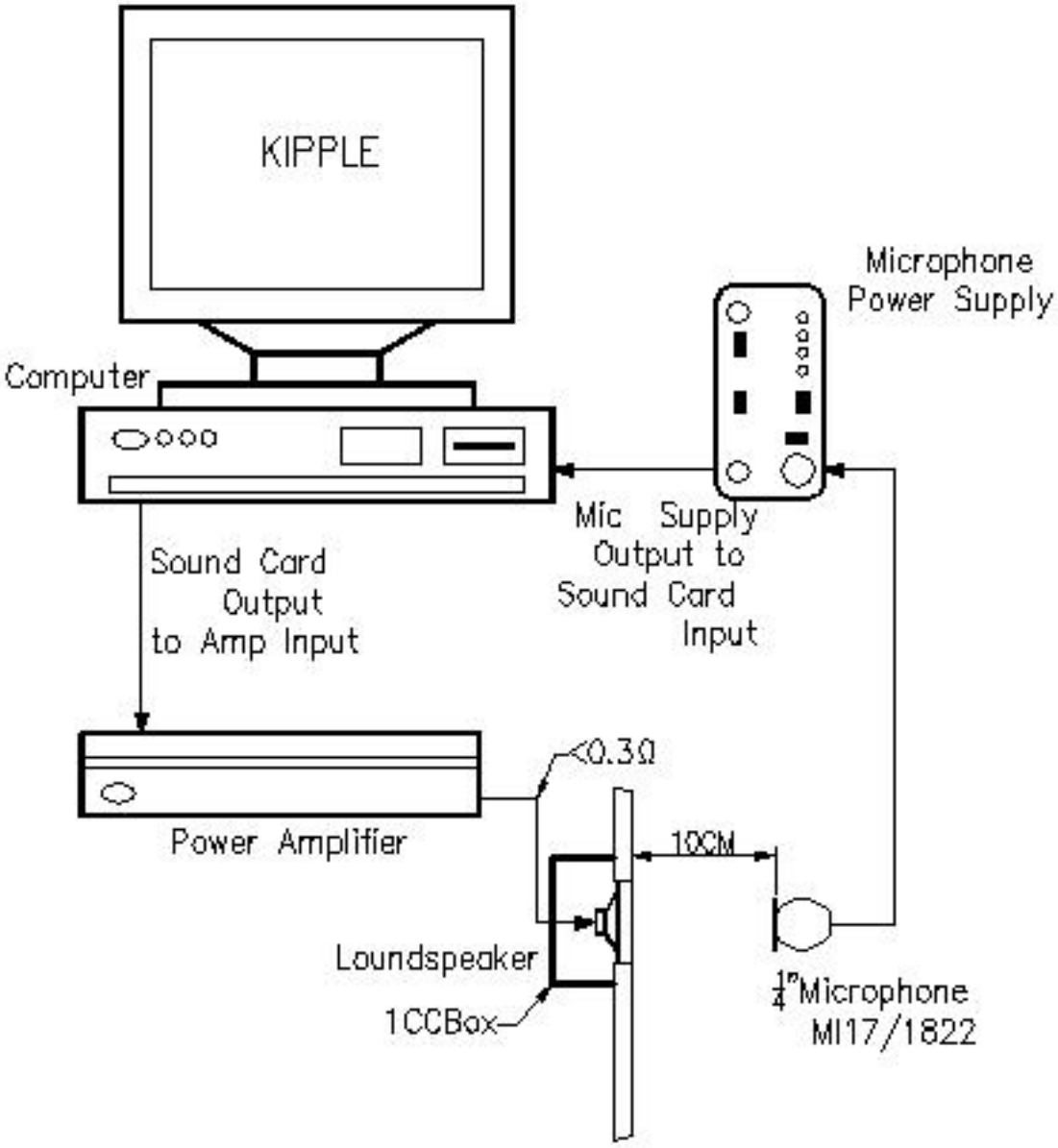


Fig.1 measuring diagram

■频率响应曲线图 **TYPICAL FREQUENCY RESPONSE CURVE (Fig.2)**

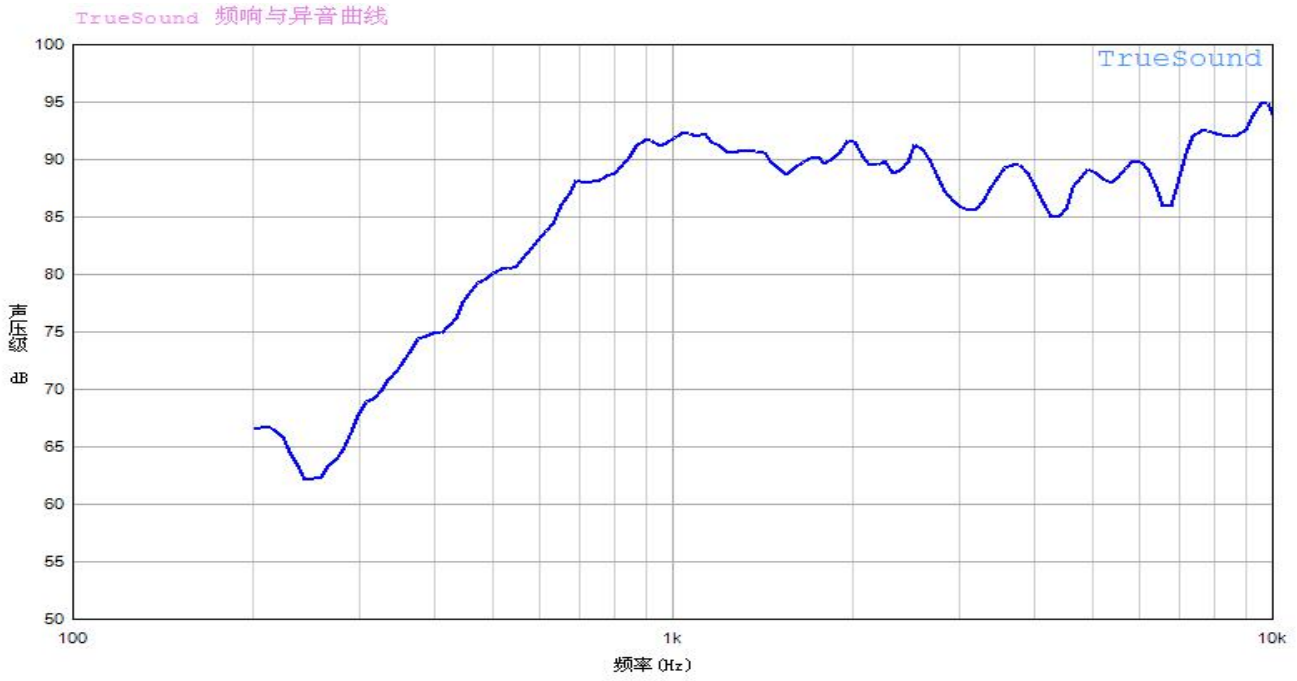


Fig.2 Typical frequency response curve

■失真曲线图 SPEAKER DISTORTION CURVE(fig.3)

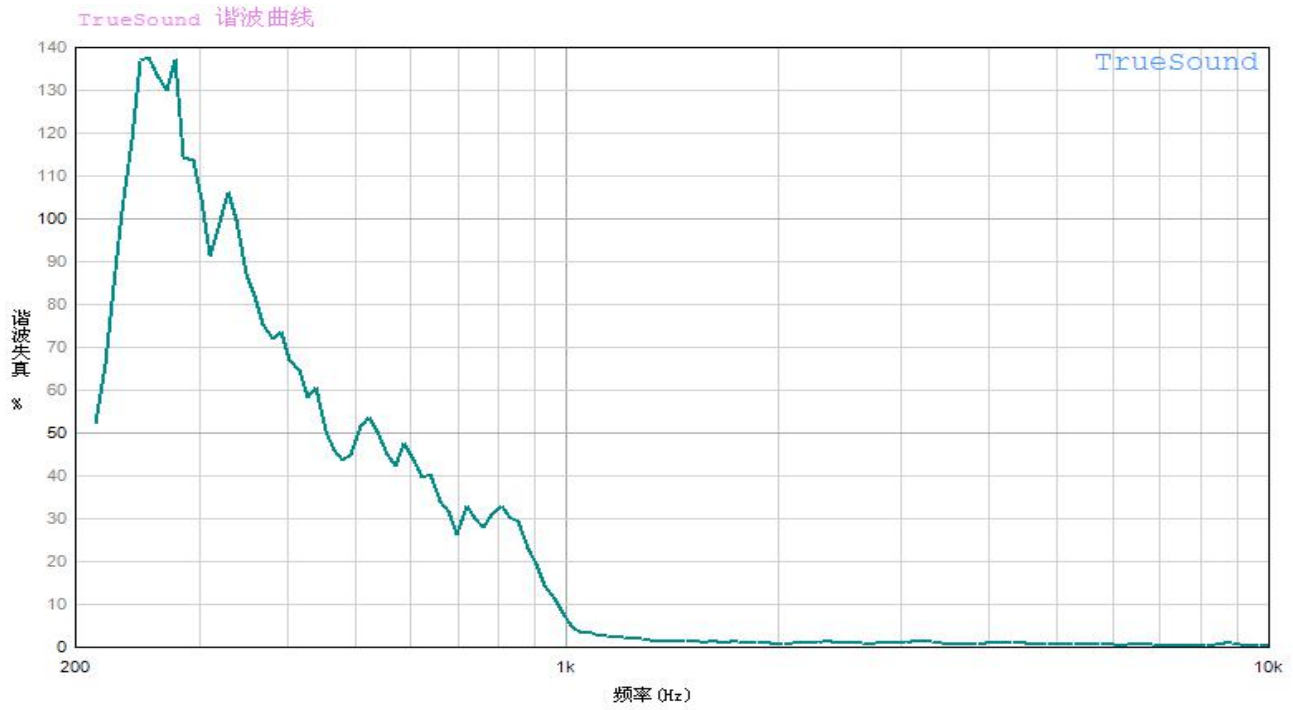


Fig.3 Typical distornition frequency response curve

5. 可靠性测试 RELIABILITY TESTS

扬声器进行下列测试后 SPL 变化不允许超出±5dB，不允许有任何机械或者热损伤。

The sound pressure as specified shall neither deviate more than ±5dB from the initial value, nor any significant damage after any of following testing.

5.1 高温试验 HIGH TEMPERATURE TEST

High temperature: **+70±2℃**

Duration: **16 hours**

5.2 低温试验 LOW TEMPERATURE TEST

Low temperature : **-30±2℃**

Duration: **16 hours**

5.3 冷热冲击试验 HEAT SHOCK TEST

High temperature: **+70±2℃**

Low temperature: **-30±2℃**

Changeover time: **< 30 seconds**

Duration: **1 hour**

Cycle: **5**

5.4 高温高湿试验 HUMIDITY TEST

Temperature:	**+40±2℃**
Relative humidity:	**90～95%**
Duration:	**16 hours**

5.5 高低温循环试验 TEMPERATURE CYCLE TEST

Temperature:	**-30℃**	**+20℃**	**+70℃**
Duration:	**30 minutes**	**15 minutes**	**30 minutes**
Temperature gradient:	**1~3℃/min.**		
Cycle:	**5**		

5.6 跌落试验 DROP TEST

Free drop a unit to the surface of 10mm thick board

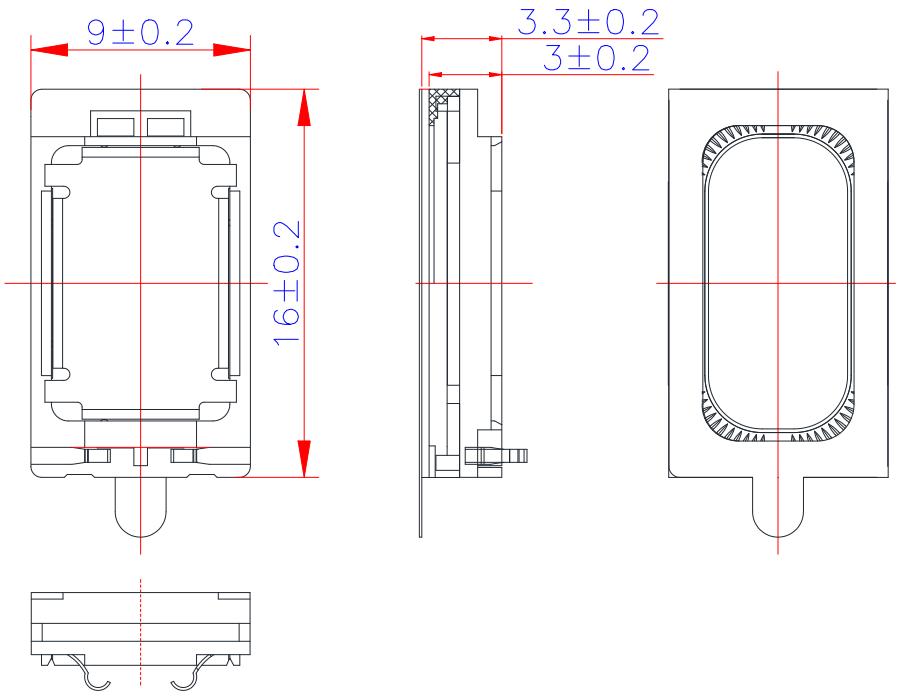
Height:	**100cm**
Cycle:	**6 (1 each plain) onto the concrete board**

5.7 可靠性试验 Load test

White Noise.:**20~20kHz** Rated Power: **0.7W 96Hours in 1cc box**

6. 外形图 *DIMENSIONS*

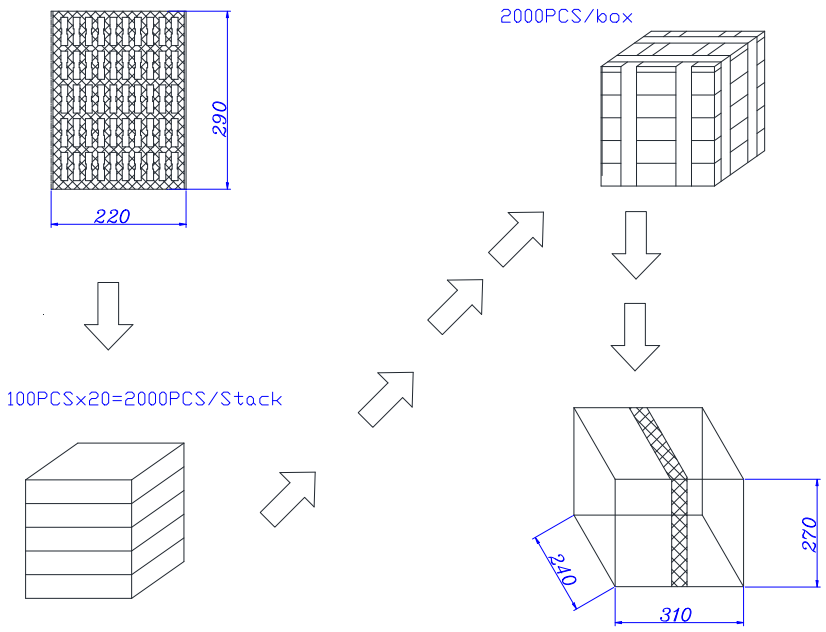
Unless otherwise specified, tolerance: ±0.5 (unit: mm)



9	垫圈 GASKET	0.3T	1	
8	焊片 SPRING TERMINAL	SUS	2	
7	前盖 FRONT CAP	PPA or PBT	1	
6	音圈 VOICE COIL	COPPER WIRE	1	
5	膜片 DIAPHRAGM	PEEK or PEN	1	
4	U 铁 U YOKE	SPCE	1	
3	极片 POLE PIECE	SPCC	1	
2	磁钢 MAGNET	NdFeB	1	
1	主架 FRAME	PPA or PBT	1	
编号 No.	**零件名称 PART NAME**	**材料 MATERIAL**	**数量 Q'TY**	**备注 REMARK**

Fig4. Outer dimension

7. 包装图 PACKING



每盘 100 个　　100pcs of speaker in each tray
每箱 20 盘　　20 trays in one carton
总计:2000 个 / 1 箱 Total:2000 pcs / 1 carton
毛重: 4.0KGS　　Gross Weight:4.0KGS
净重: 2.5KGS　　Net Weight: 2.5KGS

Fig5. Packing dimension