

	Part name	Ferrite Magnetic Speaker (Plastic)	Date	2025-02-18
	Part number	S-50-8R0.5W-CY01B	Edition	V1
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1. 范围 SCOPE

此规格涵盖了我们的所有电话用动圈式扬声器产品。
This specification covers our product of dynamic speaker unit for mobile telephone use.

2. 外形、尺寸 MECHANICAL LAYOUT & DIMENSIONS

示意图 5 Shown in Fig.5

3. 常规要求 GENERAL REQUIREMENTS

- 3.1 尺寸规格 NOMINAL SIZE:50*H7.0
- 3.2 工作温度 OPERATING TEMPERATURE RANGE: -20℃ ~ +60℃
- 3.3 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 hPa

3.4 判断条件 JUDGEMENT CONDITIONS:

温度 Temperature: 20±2℃
湿度 Relative Humidity: 60%~70%(RH)
大气压力 Air Pressure: 860~1060 hPa

4. 电声特性 ELECTROACOUSTIC CHARACTERISTIC

4.1 声压级 SOUND PRESSURE LEVEL

94±3dB SPL @0.8,1.0,1.2,1.5KHz in average (0dB SPL=20 μ Pa)
Measuring condition: 0.1W (Sine wave) 0.1m measured with baffler shown in Fig.1.

4.2 阻抗 IMPEDANCE: 8±15%Ω (@2KHz 1V) without baffler.

4.3 测试示意图 MEASURING DIAGRAM: Shown in Fig.1

4.4 曲线图 TYPICAL FREQUENCY RESPONSE CURVE: Shown in Fig.2.

4.5 额定功率 RATED SINE POWER:0.5W. 最大功率 MAX SINE POWER: 1.0W.

4.6 谐振频率 RESONANCE FREQUENCY (F₀):390±20%Hz @ 1V. (Without Baffler)

4.7 总谐波失真 TOTAL HARMONIC DISTORTION: Less than 5% @1KHz,1W

4.8 纯音检听 Audible Noise: 应无异常音和杂音（输入信号频率范围 350Hz~1.5KHz 输入电压 2.0v）Must be free audible noise (buzzes and rattles) (500 Hz~20KHz frequency range, input level up to 2.0 Vrms)

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频率曲线测试示意图 ■ **FREQUENCY MEASURING DIAGRAM (Fig.1)**

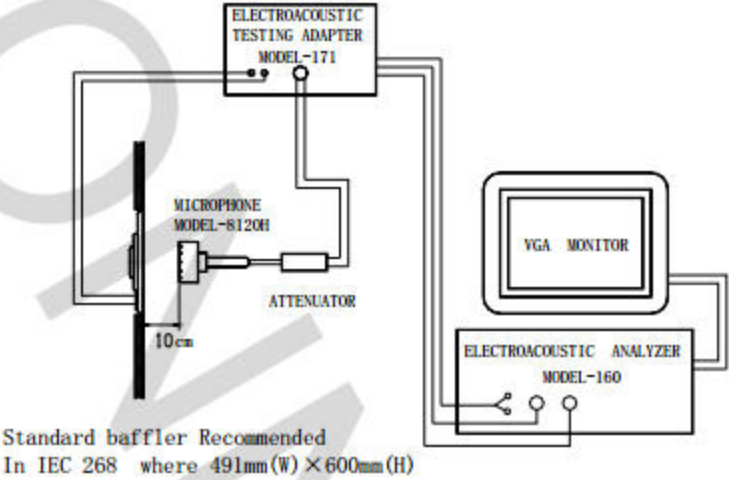


Fig.1 Illustration of measuring diagram

■ **TYPICAL FREQUENCY RESPONSE CURVE (Fig.2)**

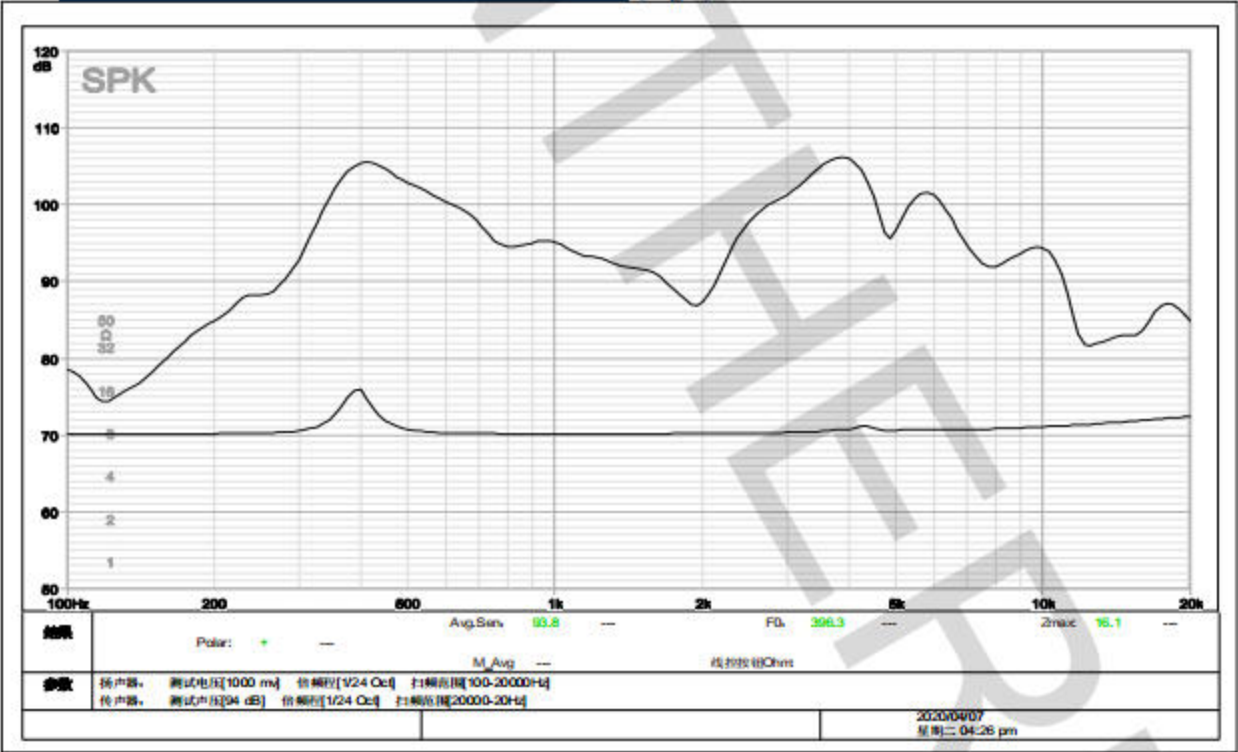


Fig.2 Typical frequency response curve

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6. 可靠性试验 **RELIABILITY TESTS**

The sound pressure as specified shall neither deviate more than $\pm 3\text{dB}$ from the initial value, nor any significant damage after any of following testing.

6.1 高温试验 **HIGH TEMPERATURE TEST**

High temperature: **$+60\pm 2^{\circ}\text{C}$**
Duration: **48 hours**

6.2 低温试验 **LOW TEMPERATURE TEST**

Low temperature : **$-20\pm 2^{\circ}\text{C}$**
Duration: **48 hours**

6.3 高低温冲击试验 **HEAT SHOCK TEST (See in Fig.3)**

High temperature: **$+60\pm 2^{\circ}\text{C}$**
Low temperature: **$-20\pm 2^{\circ}\text{C}$**
Changeover time: **< 30 seconds**
Duration: **45 minutes**
Cycle: **2**

6.4 湿度试验 **HUMIDITY TEST**

Temperature: **$+40\pm 2^{\circ}\text{C}$**
Relative humidity: **90~95%**
Duration: **96 hours**

6.5 湿度循环试验 **TEMPERATURE CYCLE TEST (See in Fig.4)**

Temperature: **-20°C** **$+60^{\circ}\text{C}$**
Duration: **45 minutes** **45 minutes**
Temperature gradient: **$1\sim 3^{\circ}\text{C}/\text{min.}$**
Cycle: **2**

6.6 跌落试验 **DROP TEST**

Mounted with dummy set mass: **100 g**
Height: **1 m**
Cycle: **6 (1 each plain)**
onto the concrete board

6.7 负荷试验 **LOAD TEST**

Subject samples to White noise (EIA filter) for **48 hours @0.5W** input power.

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■ HEAT SHOCK TEST (Fig.3)

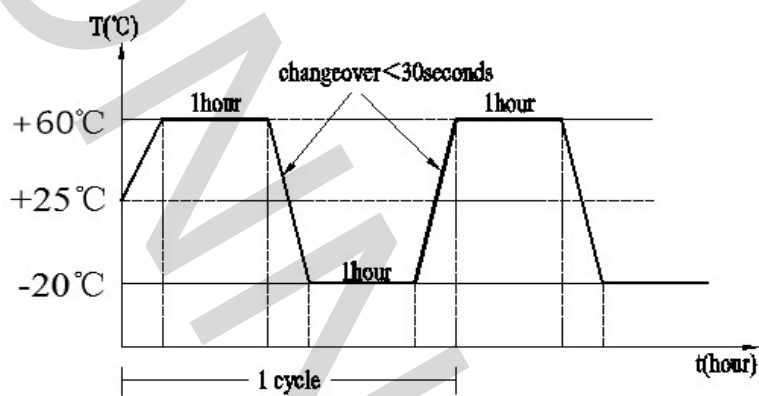


Fig.3 Illustration of heat shock test

■ TEMP. CYCLE TEST (Fig.4)

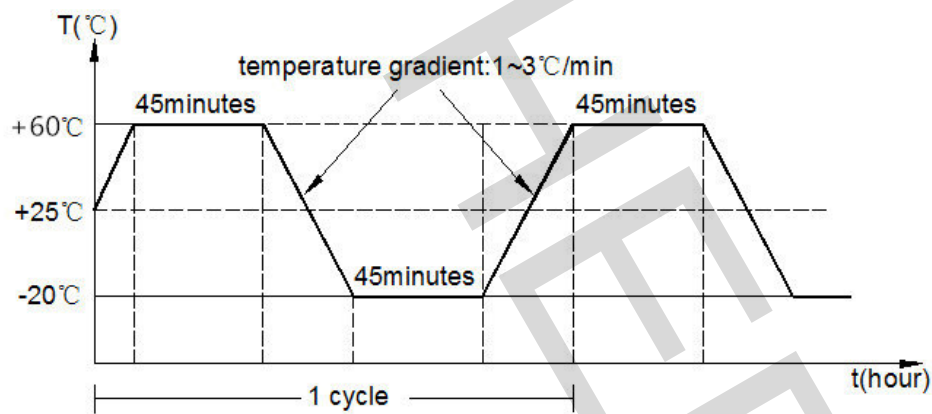


Fig..4Illustration of temp. cycle test

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DIMENSIONS (Fig.5)

Unless otherwise specified, tolerance: ± 0.30 (unit: mm)

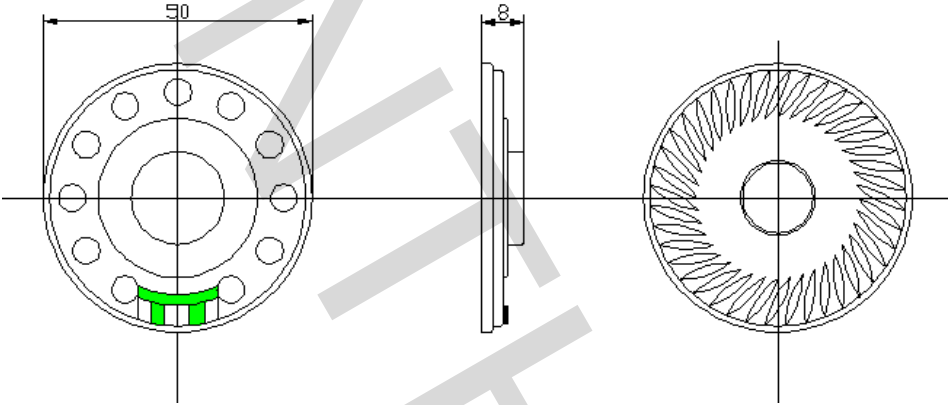


Fig.5 Outer dimension