

东莞市睿恩电子科技有限公司

Dongguan Ruien Electronic Technology Co., Ltd.

规格认定书

SPECIFICATION FOR APPROVAL

产品类型 PRODUCT: DYNAMIC SPEAKER

博粤型号 VTS P/N: RN2040-01

客户 CUSTOMER:

客户机型 CUSTOMER P/N:

版本 REVISION: A/0

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注: 若客户认可, 请把此规格书复印本交回我公司, 谢谢合作!

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1. 适用范围 SCOPE

This specification covers our product of dynamic speaker .

2. 扬声器电气特性 SPEAKER ELECTRICAL CHARACTERISTICS

2.1 声压级 SOUND PRESSURE LEVEL: $95\pm3\text{dB SPL}$ At1.0KHz in average (0dB SPL= $20\mu\text{Pa}$)

Input voltage: 0.1W(Sine wave)0.1M Measured baffler recommended.

2.2 共振频率 RESONANCE FREQUENCY (F_0): $500\pm20\text{Hz}$ @ 1Vrms. (Without Baffler)

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

2.4 频响曲线 TYPICAL FREQUENCY RESPONSE CURVE: Shown in Fig.2.

2.5 额定噪声功率 RATED NOISE POWER: 2.0W

2.6 失真 DISTORTION: Less than $<15\%$ at 1KHz 1.0V

2.7 纯音检听 OPERATION TEST: Must be free audible noise (buzzes and rattles) ($F_0 \sim 5000\text{Hz}$ frequency range ,input level up to 4.0Vrms)

3. 一般规范 GENERAL SPECIFICATIONS

3.1 工作温度范围 OPERATING TEMPERATURE RANGE: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$

3.2 存储温度范围 STORAGE TEMPERATURE RANGE: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$

3.3 直流电阻 Dc RESISTANCE: $7.4\Omega \pm 10\%$

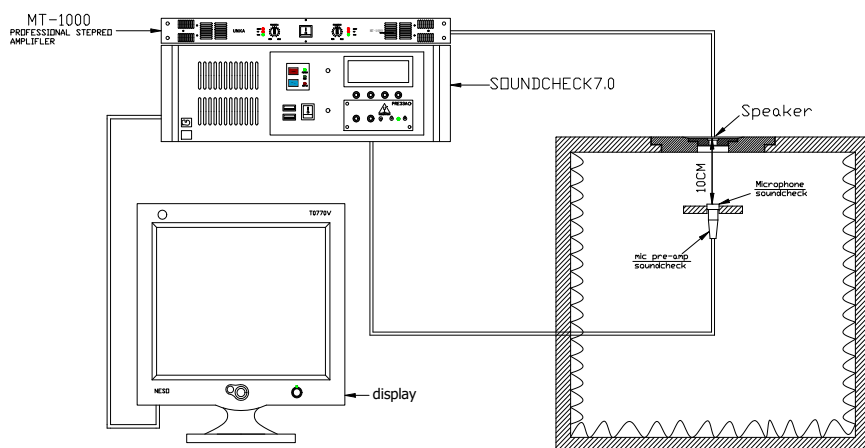
交流电阻 Ac IMPEDANCE: $8\Omega \pm 15\%$ (@1KHz 1Vrms)

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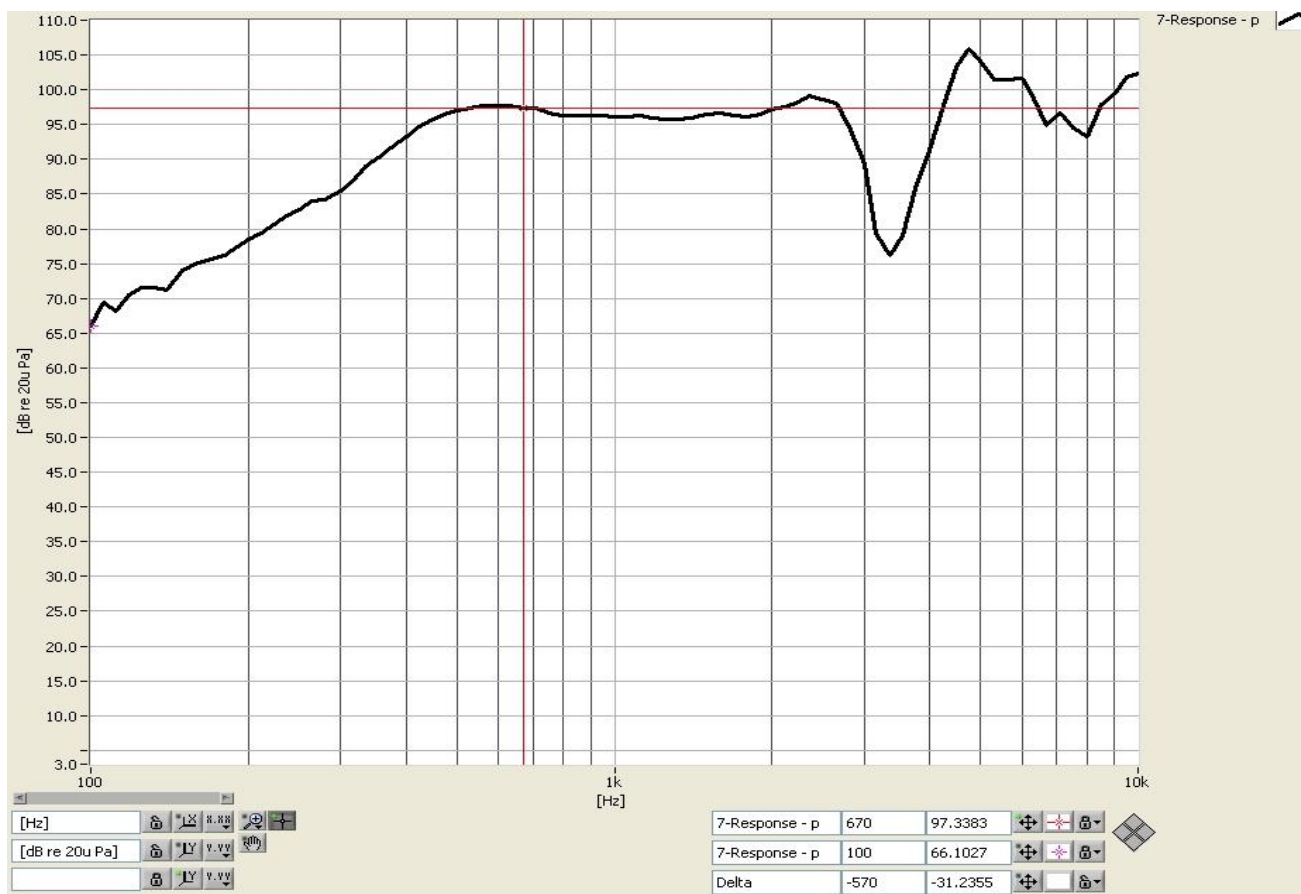
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4 标准频响曲线 TYPICAL FREQUENCY RESPONSE CURVE

4.1 频响测试电路 FREQUENCY MEASURING CIRCUIT (SPEAKER MODE) (Fig.1)



4.2 标准频响曲线 TYPICAL FREQUENCY RESPONSE CURVE (SPEAKER MODE) (Fig. 2)



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5. 测试气候条件 TEST CLIMATIC CONDITIONS

5.1 标准实验条件 STANDARD TEST CONDITIONS:

温 度 Temperature:	17~25℃
相对湿度 Relative Humidity:	45%~80% (RH)
气 压 Air Pressure:	860~1060hPa

5.2 仲裁条件 JUDGEMENT CONDITIONS:

温 度 Temperature:	20±2℃
相对湿度 Relative Humidity:	60%~70% (RH)
气 压 Air Pressure:	860~1060 hPa

6. 信赖性实验 RELIABILITY TESTS

测试后取出在常温下搁置 2 小时，声压级不能低于测试前±3dB，不能有明显的功能性损坏 The sound pressure as specified shall neither deviate more than ±3dB from the initial value, nor any significant damage after any of following testing.

6.1 高温实验 HIGH TEMPERATURE TEST

高温 High temperature:	+75±2℃
持续时间 Duration:	96 hours

6.2 低温实验 LOW TEMPERATURE TEST

低温 Low temperature :	-40±2℃
持续时间 Duration:	96 hours

6.3 温度冲击实验 HEAT SHOCK TEST (See in Fig.3)

高温 High temperature:	+75±2℃
低温 Low temperature:	-40±2℃
转换时间 Changeover time:	< 30 seconds
持续时间 Duration:	1 hour
循环 Cycle:	10

6.4 湿度实验 HUMIDITY TEST

温度 Temperature:	+40±2℃
相对湿度 Relative humidity:	90~95%
持续时间 Duration:	48 hours

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6.5 温度循环实验 TEMPERATURE CYCLE TEST (See in Fig.4)

温度 Temperature: -40℃ +75℃
持续时间 Duration: 45 minutes 45 minutes
温度梯度 Temperature gradient: 1~3℃/min.
周期 Cycle: 10

6.6 跌落实验 DROP TEST

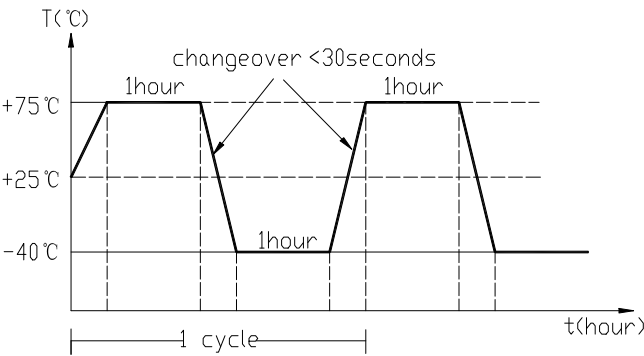
安装的虚拟重量 Mounted with dummy set mass: 48 g
高度 Height: 1.5 m
周期 Cycle: 6 (1 each plain)
onto the concrete board

6.7 负载实验 LOAD TEST

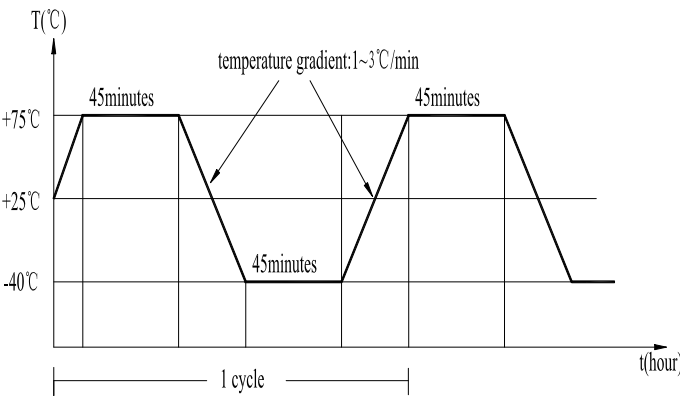
噪音信号 Noise signal: White noise (EIA filter)
输入功率 Input power: 2.0W (4.0Vrms)
持续时间 Duration: 96 hours

7. 实验方法 TEST METHOD

7.1 温度冲击实验 HEAT SHOCK TEST (Fig.3)



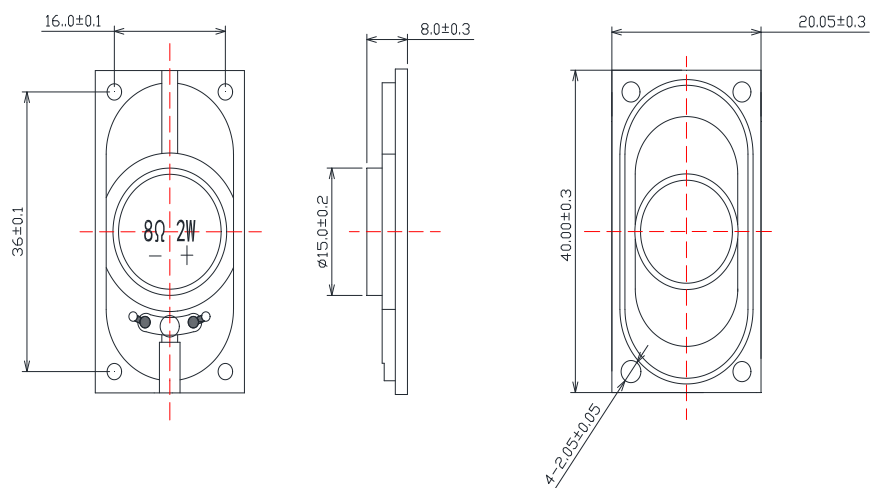
7.2 温度循环实验 TEMP. CYCLE TEST (Fig.4)



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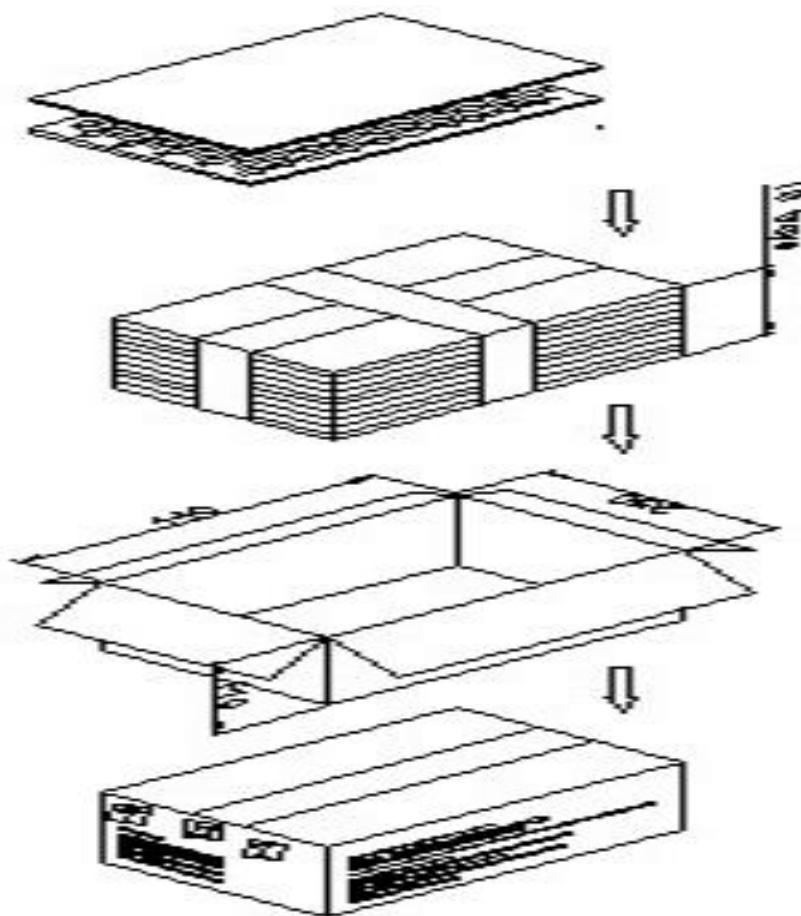
8. 产品外观尺寸 PRODUCT OUTSIDE VIEW AND DIMENSIONS (Fig. 5)



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9. 包装明细 PACKING DETAILED DATA



每盘 100 SET 100set of speaker in each tray

每箱 50 层 50trays in one carton

总计:5000SET / 1 箱 Total:5000set / 1 carton