

SPECIFICATION FOR APPROVAL

产品规格承认书

JC-SPK4016-BOX01-4R2W-WL

40×16 腔体扬声器 / 40×16 BOX Speaker

Customer / 客户	
Customer P/N / 客户料号	
Supplier / 供应商	常州市嘉传电子有限公司 Changzhou Jiachuan Electronics Co., Ltd.
Jiachuan P/N / 嘉传型号	JC-SPK4016-BOX01-4R2W-WL
Description / 产品名称	40×16 腔体扬声器 / 40×16 BOX Speaker
Specification / 产品规格	40×16×8.0 mm / 4Ω / Rated 2.0W / Max. 3.0W
Issue Date / 发行日期	2026-10-02
Revision / 版本	A0

Approval / 签核

Prepared 制作	Checked 审核	Approved 批准	Company Seal 公司印章
李明珠	王敏娜	黄继桥	

Customer Confirmation / 客户确认

Customer Approval / 客户承认	
Date / 日期	

1. 使用范围 / Scope

本规格书适用于 40×16 mm 矩形腔体引线式动圈扬声器。 / This specification applies to the 40×16 mm rectangular BOX dynamic speaker with wire leads.

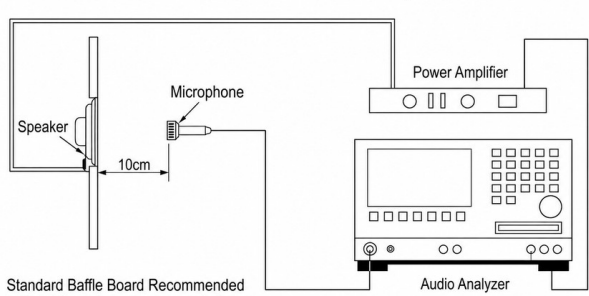
2. 电声特性 / Electro-acoustic Characteristics

No.	Item / 项目	Specification / 规格	Condition / 条件
2.1	Dimension / 外形尺寸	40×16×8.0 mm	—
2.2	Rated / Max. Power / 额定/最大功率	Rated 2.0W Max. 3.0W	—
2.3	Rated Impedance / 额定阻抗	4Ω ±20%	2kHz / 1V
2.4	DCR / 直流电阻	—	—
2.5	F0 / 共振频率	850Hz ±20%	1V
2.6	SPL / 输出声压	103±3 dB	2.0W / 0.1m; Avg. 0.8/1.0/1.5/2.0kHz; IEC baffle
2.7	Frequency Range / 频率范围	F0 20Hz ~ 20kHz	—
2.8	THD / 总谐波失真	≤10%	1kHz, 2.0W
2.9	Operation Test / 工作测试	Normal at sine wave and program source	2.0W
2.10	Buzz & Rattle / 异常音	No audible noise	2.83V, F0~5kHz
2.11	Weight / 重量	6.7±0.3g	—
2.12	Polarity / 极性	Positive → diaphragm moves forward	—
2.13	Temperature / 温度范围	Operating: -20°C~+60°C Storage: -30°C~+70°C	—
2.14	Appearance / 外观	No damage, cracks, rust or distortion affecting normal operation	—

3. 可靠性测试 / Reliability Test

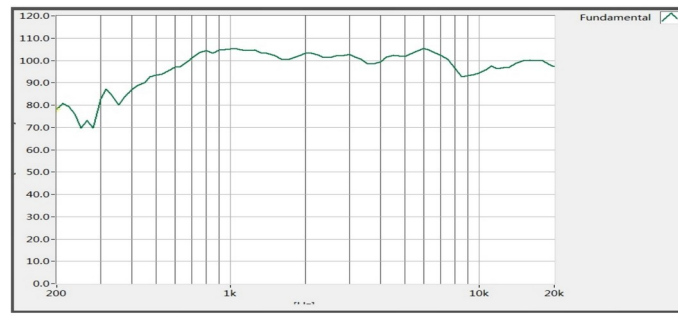
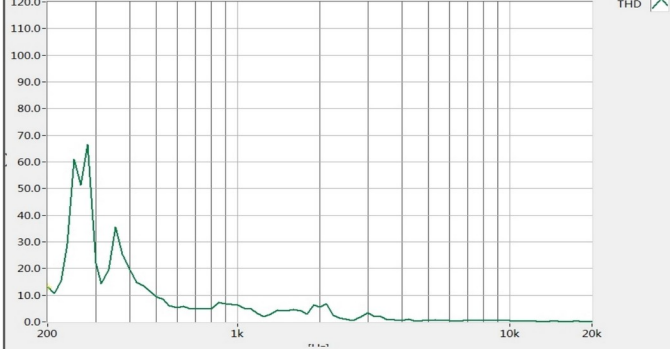
Item / 项目	Condition / 条件	Acceptance / 判定
High Temperature / 高温	+70°C±3°C, 96h; recovery 3h	Normal
Low Temperature / 低温	-30°C±3°C, 96h; recovery 3h	Normal
Humidity / 湿热	+40°C±3°C, 95%RH, 96h; recovery 3h	Normal
Thermal Cycle / 温度循环	-30°C±3°C ↔ +60°C±3°C; 1h/cycle each; 5 cycles	Normal
Vibration / 振动	10~55~10Hz sine sweep, 15min; 5G; X/Y/Z 2h each	Normal
Drop / 跌落	100cm to 20mm board; 6 directions ×1	Normal
Operation Life / 寿命	Rated-power white noise, 96h	Normal
Max Power / 最大功率	1min ON / 2min OFF ×10 cycles	Normal
Terminal Strength / 端子强度	1kg load, 15s	Normal
Pass Criterion / 判定标准	After recovery	SPL change within ±3dB

4. 测量方式 / Measurement Method

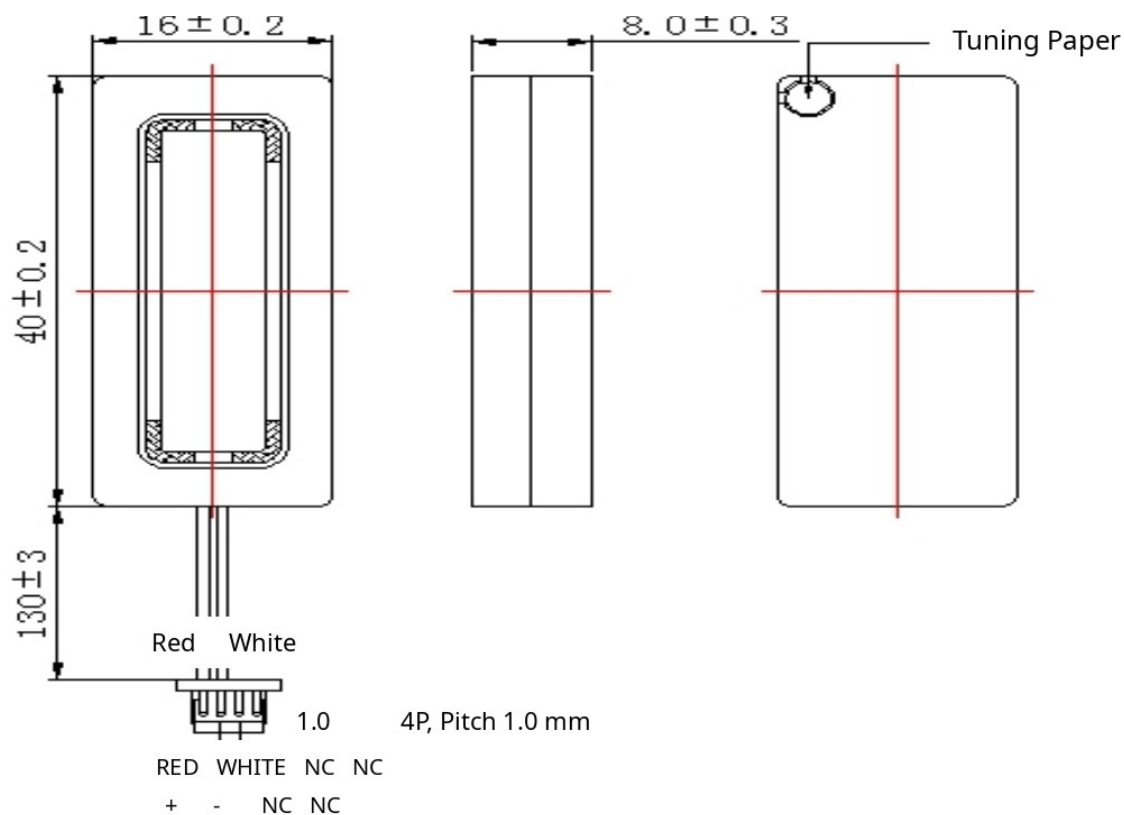
Standard test condition of speaker  Standard Baffle Board Recommended In IEC 268-5 Where 1650mmx1350mm	Test Conditions / 测试条件 Standard temperature: 15–35°C Relative humidity: 45%–85% RH Atmospheric pressure: 860–1060 mbar Judgement temperature: 20±3°C Judgement RH: 60%–70% RH Input: 0.1W (0.89V) Mode: TSR Potentiometer range: 50dB Sweep time: 0.5s
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说明：测量示意图用于统一测试表达，具体测试条件见右侧。 / The measurement diagram is illustrative; test conditions are shown on the right.

5. 技术曲线 / Response Curves

5-1. Frequency Response / 频率响应 	5-2. Distortion / 失真 
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6. 外形尺寸图 / Product Outside View



备注 / Note: 端子及线材可按客户指定要求制作。 / Terminal and wire specifications can be customized according to customer requirements.

7. 材料 / Materials

No.	Part Name / 零件	Q'ty	Material / 材料	Remark
7	Lead Wire / 引线	2	—	RoHS
6	PCB / 线路板	1	FR4	RoHS
5	Magnet / 磁铁	1	NdFeB	RoHS
4	Plate / 华司	1	SPCC	RoHS
3	Voice Coil / 音圈	1	HTW-UF5	RoHS
2	Diaphragm / 振膜	1	PEEK	RoHS
1	Front Cover / 前盖	1	ABS	RoHS

8. 端子与包装 / Terminal & Packing

端子及线材可按客户指定要求制作。 / Terminal and wire specifications can be customized according to customer requirements.

包装方式: 可按客户指定要求包装。 / Packaging can be arranged according to customer requirements.