



SPECIFICATION FOR APPROVAL

产品规格承认书

JC-SPK2828-BOX01-4R2W-W 28×28 BOX 腔体喇叭 / BOX Speaker

Item 项目	Information 信息
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-SPK2828-BOX01-4R2W-W
Description 产品名称	28×28 BOX 腔体喇叭 / BOX Speaker
Specification 产品规格	28×28×10.0mm / 4Ω / Rated 2W / Max. 3W
Issue Date 发行日期	2026-09-28
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

PRODUCT SPECIFICATION / 产品规格内容

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1. 使用范围 / Scope

本规格书适用于多媒体产品中使用的微型扬声器单体。
This specification covers the miniature speaker unit for multimedia products.

2. 标准测试条件 / Test Condition

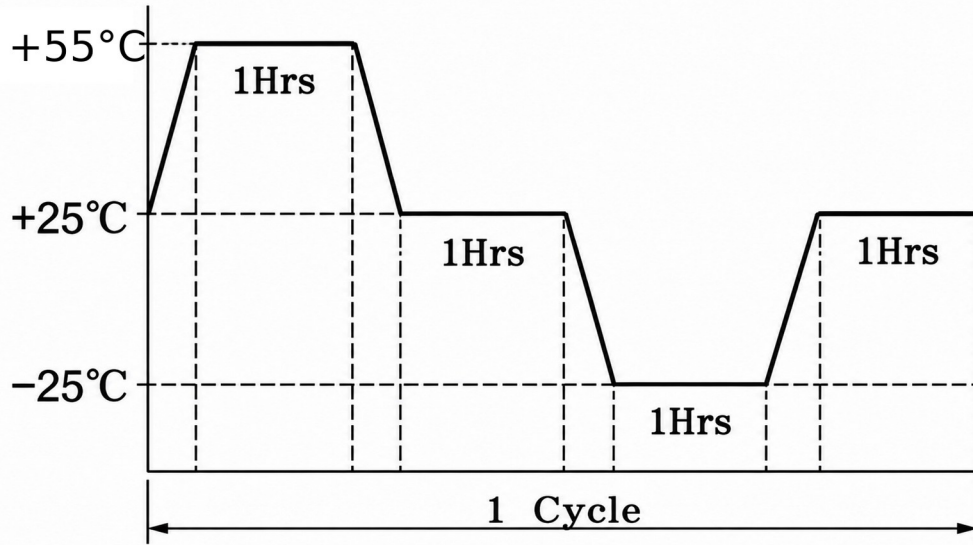
一般规格试验状态（特殊要求除外）：温度 5~35℃，相对湿度 45%~85%，气压 860~1060 hPa。
判定有疑问时：温度 20±2℃，相对湿度 60%~70%，气压 860~1060 hPa。
Unless otherwise specified: temperature 5~35℃, RH 45%~85%, atmospheric pressure 860~1060 hPa. For reference judgement: 20±2℃, RH 60%~70%, 860~1060 hPa.

3. 电声特性 / Electro-acoustic Characteristics

No.	Item / 项目	Specification / 规格	Condition / 条件
3.1	额定阻抗 / Rated Impedance	4.0Ω ±20%	At 1.6kHz, 1.0Vrms
3.2	额定输入功率 / Rated Input Power	2.0W	At 2.83Vrms white noise, 96h
3.3	最大输入功率 / Max. Input Power	3.0W	
3.4	最低共振频率 / Resonant Frequency	1000Hz ±20%	
3.5	输出音压 / Output S.P.L.	102±3dB	0.1W, 0.1m; Avg. at 0.8/1.0/1.5/2.0kHz
3.6	实效频率范围 / Frequency Range	Fo~20kHz	By Output S.P.L. -10dB
3.7	失真率 / Distortion	<5%	At 1.6kHz, 2.0Vrms
3.8	工作温度 / Operating Temperature	-25℃~+55℃	
3.9	储存温度 / Storage Temperature	-25℃~+55℃	

4. 可靠性测试 / Reliability Test

4.1 高低温循环测试 / Temperature Cycling Test



Item	Condition / 条件	Specification / 规格
A	Low Temperature / 低温	-25°C ±3°C
B	High Temperature / 高温	+55°C ±3°C
C	Number of Cycle / 循环次数	3 Cycles
D	Duration of Exposure / 极温保持	1 Hour at each temperature extreme
E	Duration of Recovery / 恢复时间	1 Hour

4.2 抗湿度试验 / Humidity Test

相对湿度 / Relative Humidity	90~95% at +40°C ±3°C
测试时间 / Duration	96 Hours
恢复时间 / Recovery	6 Hours

4.3 连续负载测试 / Load Test

White Noise Without Weighted Filter, 2.83Vrms, 100 Hours.

4.4 跌落试验 / Drop Test

75cm free falling on concrete floor, 10 times.

4.5 异常音测试 / Buzzes & Rattles

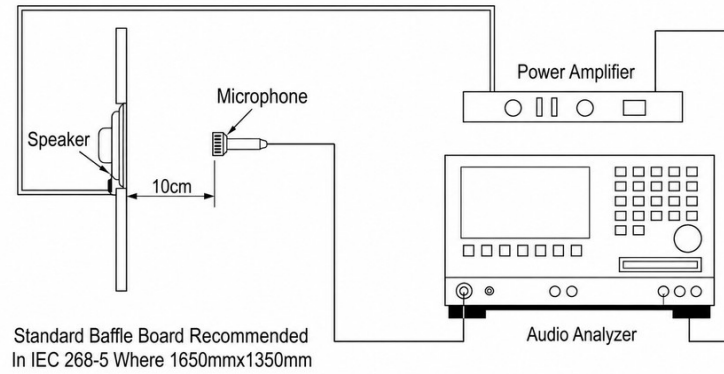
Sine wave at 2.5Vrms / 200~5000Hz.

4.6 极性测试 / Polarity Test

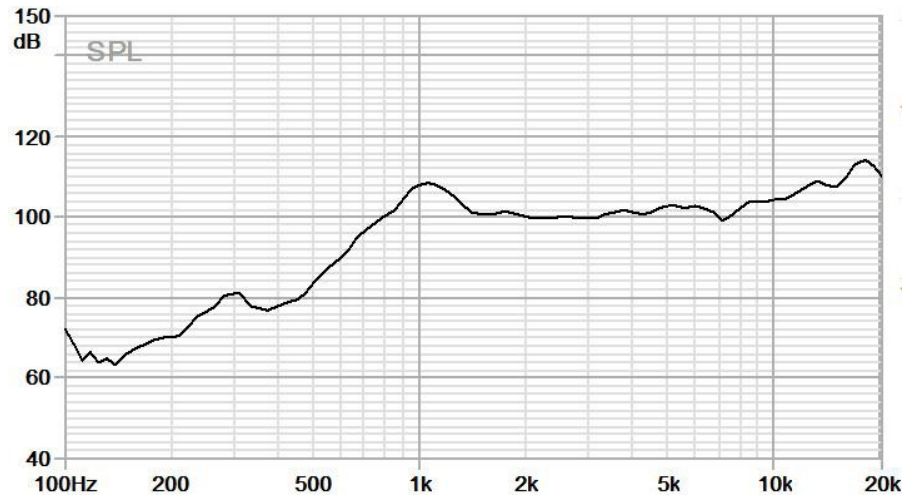
When positive DC current is applied to the "+" or marked terminal, the diaphragm shall move forward.

5. 测量方式 / Measurement Method

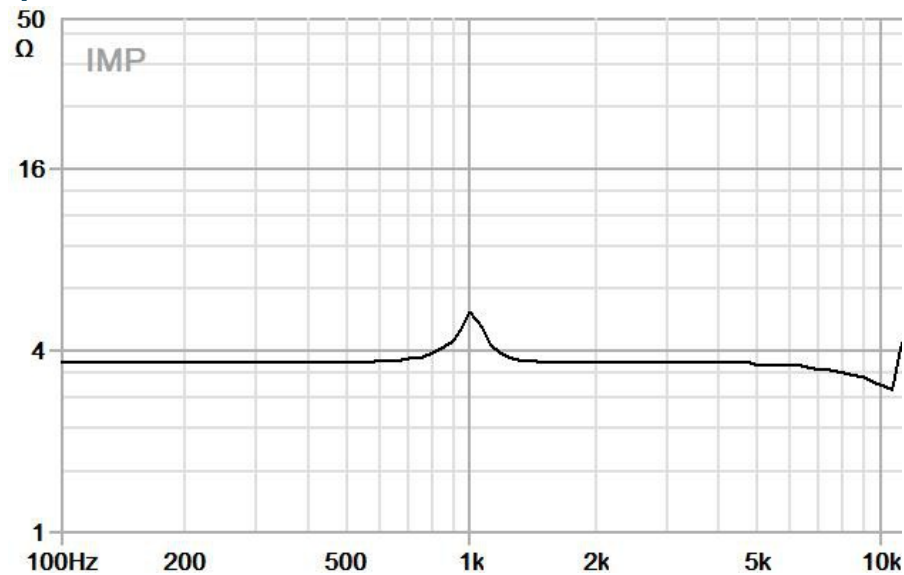
Standard test condition of speaker



6. 频率响应曲线 / Frequency Response Curve

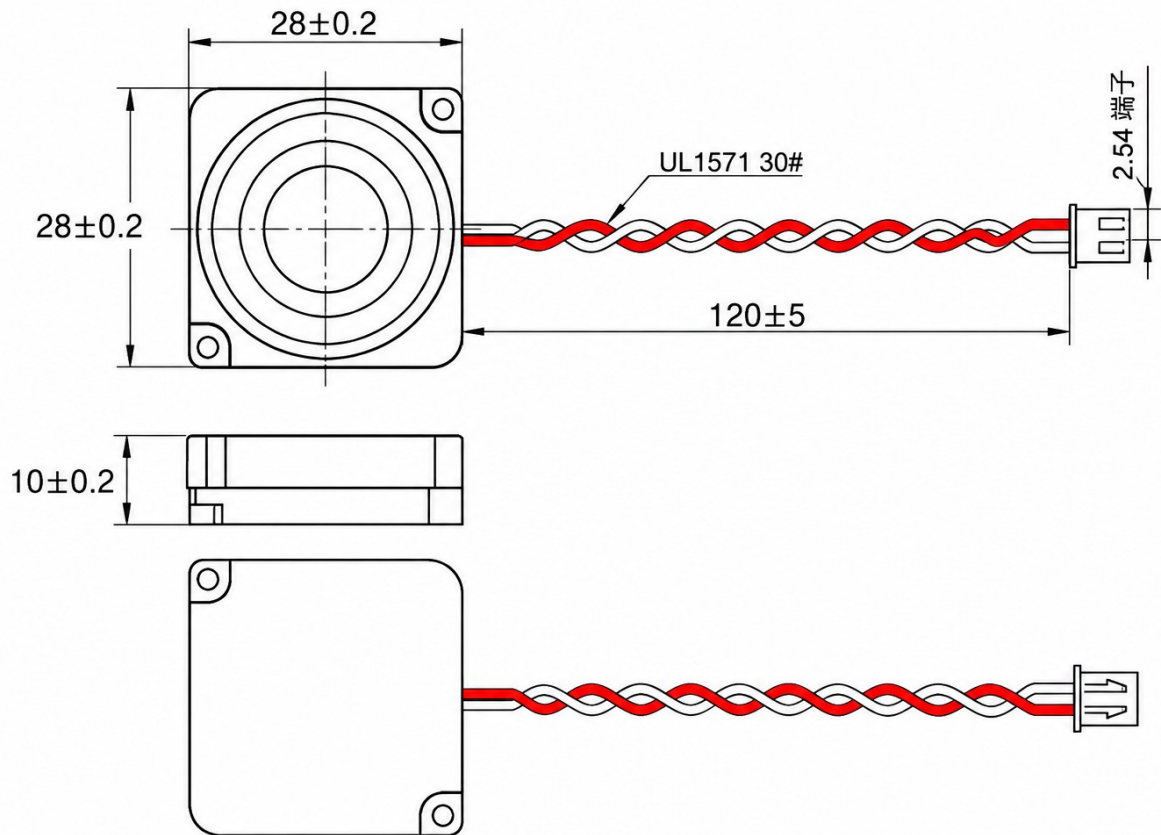


7. 阻抗曲线 / Impedance Curve



8. 机械尺寸 / Mechanical Dimensions

Unit: mm. Dimensions and tolerances are shown in the drawing. / 单位：mm，尺寸及公差以图纸标注为准。



9. 端子与线材 / Terminal & Wire

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.

10. 包装方式 / Packing

按客户要求包装。

Packaging according to customer requirements.