

SPECIFICATION FOR APPROVAL

产品规格承认书

JC-SPK4020-MF02-8R1P5W-WL

40×20 矩形扬声器 / Rectangular Dynamic 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-SPK4020-MF02-8R1P5W-WL
Description / 产品名称	40×20 矩形扬声器 / Rectangular Dynamic Speaker
Specification / 产品规格	40×20×8.0mm / 8Ω / Rated 1.5W / 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 40×20 mm 矩形引线式动态扬声器。 / This specification applies to the 40×20 mm rectangular dynamic speaker with wire leads.

2. 电声特性 / Electro-acoustic Characteristics

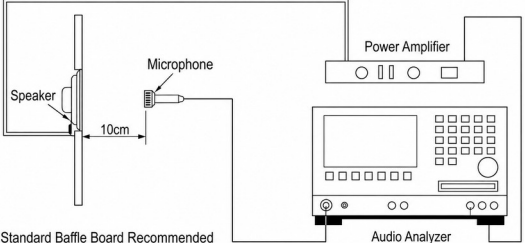
No.	Item / 项目	Specification / 规格	Condition / 条件
2.1	Dimension / 外形尺寸	40.0×20.0×8.0t	—
2.2	Rated / Max. Power / 额定/最大功率	Rated 1.5W Max. 3.0W	—
2.3	Rated Impedance / 额定阻抗	8Ω ±15%	2kHz / 1V
2.4	F0 / 共振率	550Hz ±20%	1V
2.5	SPL / 输出音压	88±3dB 84±3dB	0.1W / 0.1m; Avg. 0.8/1.0/1.2/1.5kHz 1W / 0.5m; Avg. 0.8/1.0/1.2/1.5kHz
2.6	Frequency Range / 频率范围	200Hz~20kHz	—
2.7	THD / 总谐波失真	≤5%	1kHz, 0.1W
2.8	Flux Density / 磁通密度	1.0T	—
2.9	Operation Test / 工作测试	Normal at sine wave and program source	1.5W
2.10	Buzz & Rattle / 异常音	No audible noise	2.53V, 100Hz~2kHz
2.11	Weight / 重量	7.6g	—
2.12	Voice Coil / 音圈	Φ11.75mm	—
2.13	Magnet / 磁铁	Φ11×2.0t mm, NdFeB	—
2.14	Polarity / 极性	Positive → diaphragm moves forward	—
2.15	Temperature / 度范	Operating: -20°C~+60°C Storage: -30°C~+70°C	—
2.16	Appearance / 外观	No damage, cracks, rust, distortion or defects affecting normal operation	—

3. 可靠性测试 / Reliability Test

Item / 项目	Condition / 条件	Acceptance / 判定
Max Power / 最大功率	Program white-noise at max. power: 1min ON / 2min OFF ×10 cycles; per EIA	Normal
Thermal Operating / 工作温度	50h continuous at rated power at max. and min. rated operating temperatures	Normal
Thermal Storage / 存度	96h storage at max. and min. rated storage temperatures	Normal
Thermal Shock / 温度冲击	5 cycles between min. and max. operating temperatures; 3h/cycle	Normal
Humidity / 湿热	+40±2°C, 90~95%RH, 96h	Normal
Operation Life / 寿命	Program white-noise at rated power, 96h; per EIA	Normal
Insulation / 绝缘	≥1MΩ at 100Vdc between terminals and case	Pass
Terminal Strength / 端子强度	9.8N (1kg), axial pull on each terminal, 10s	Normal
Vibration / 振动	Shipping container: 10~55Hz, 0.75mm, 15min on each of 3 axes	Normal
Drop / 跌落	Shipping container: 1m onto 40mm wood board; 3 axes ×3 (9 times total)	Normal
Reliability Performance / 可靠性	After 3h recovery	Within ±5dB
Warranty / 保证期	1 year from shipping under normal operation	—
Pass Criterion / 判定标准	After the above tests	SPL change within ±3dB

4. 测量方式 / Measurement Method

Standard test condition of speaker



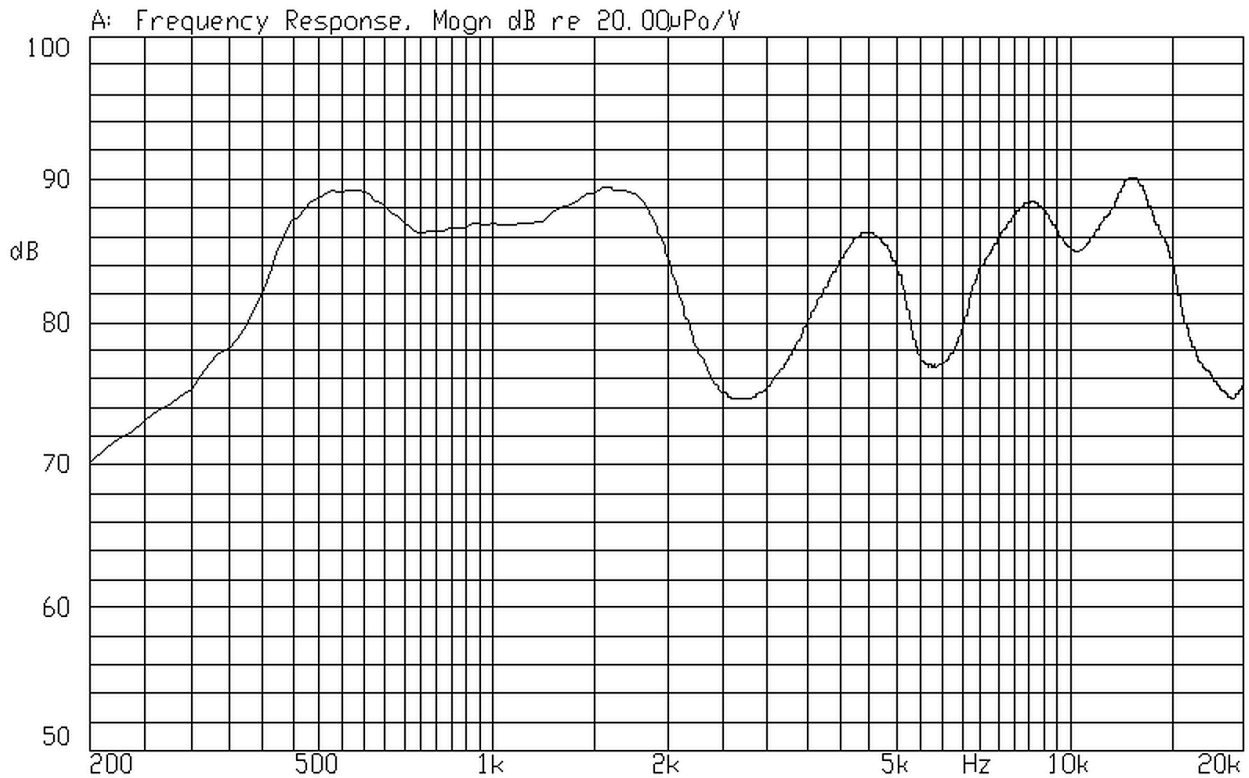
Standard Baffle Board Recommended
In IEC 268-5 Where 1650mmx1350mm

Test Conditions / 测试条件
 Standard temperature: 23~25°C
 Relative humidity: ≤55% RH
 Atmospheric pressure: 860~1060 mbar
 Judgement temperature: 20±3°C
 Judgement RH: 60%~70% RH
 Input: 1W (2.83V)
 Test distance: 0.5m
 Mode: TSR
 Potentiometer range: 50dB
 Sweep time: 0.5s

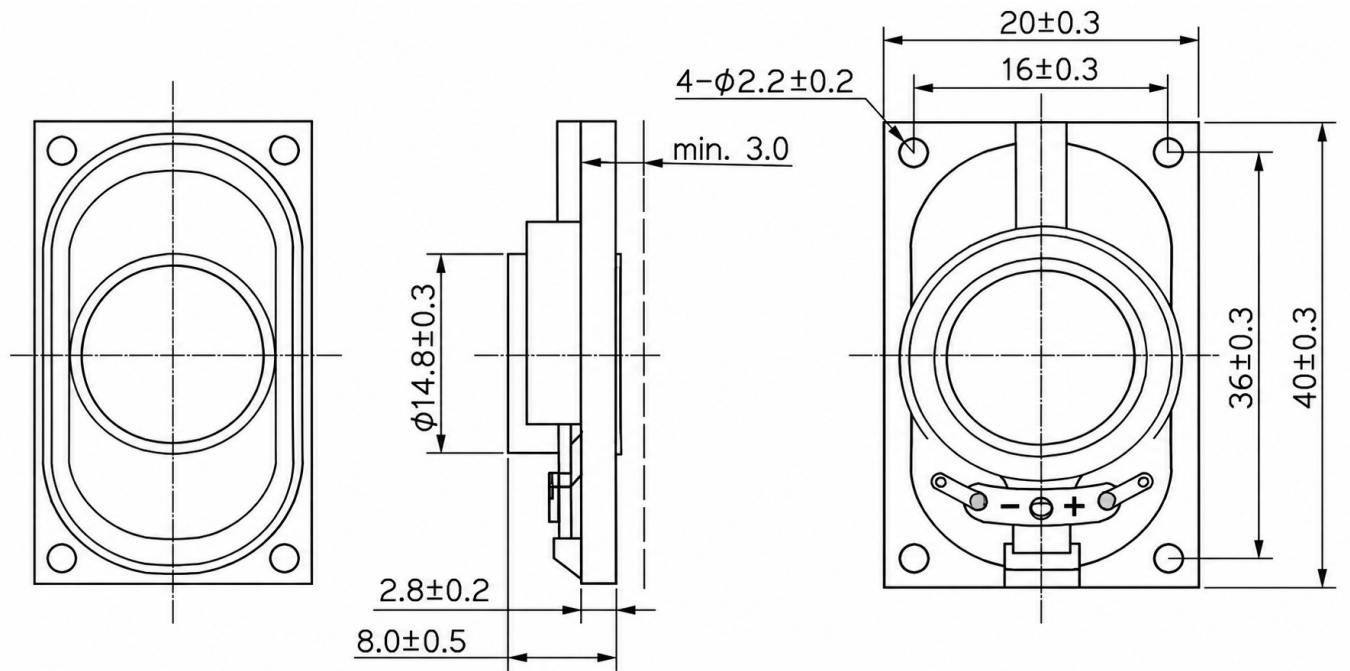
说明：测量示意图仅供参考，具体测试条件见右侧说明。 / The measurement diagram is for reference only. Detailed test conditions are shown on the right.

5. 技术曲线 / Response Curves

Curve Test Condition / 曲线测试条件：1W (2.83V) / 0.5m.



6. 外形尺寸图 / Product Outside View



7. 材料 / Materials

No.	Part Name / 零件	Q'ty	Material / 材料
7	PCB / 线路板	1	Epoxy
6	Plate / 华司	1	0.8t
5	Magnet / 磁铁	1	NdFeB
4	Voice Coil / 音圈	1	Copper wire
3	Yoke / 磁轭	1	1.0T
2	Cloth Cone / 布盆	1	Cloth
1	Frame / 框架	1	Plastic, Black

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.