

# SPECIFICATION FOR APPROVAL

## 产品规格承认书

JC-SPK4020-MF01-8R1W-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<br>Changzhou Jiachuan Electronics Co., Ltd. |
| Jiachuan P/N / 嘉传型号  | JC-SPK4020-MF01-8R1W-WL                                 |
| Description / 产品名称   | 40×20 矩形扬声器 / Rectangular Dynamic Speaker               |
| Specification / 产品规格 | 40×20×5.8mm / 8Ω / Rated 1.0W / Max. 2.0W               |
| 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

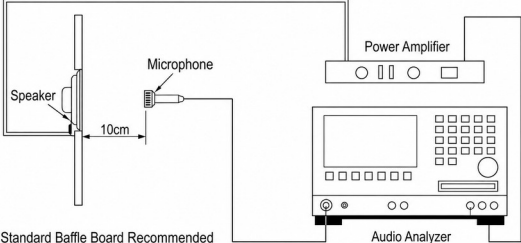
| No.  | Item / 项目                  | Specification / 规格                 | Condition / 条件                     |
|------|----------------------------|------------------------------------|------------------------------------|
| 2.1  | Dimension / 外形尺寸           | 40.0×20.0×5.8t                     | —                                  |
| 2.2  | Rated Input Power / 额定功率   | 1.0W                               | —                                  |
| 2.3  | Max. Input Power / 最大功率    | 2.0W                               | —                                  |
| 2.4  | Rated Impedance / 额定阻抗     | 8Ω ±15%                            | 1kHz / 1V                          |
| 2.5  | F0 / 共振频率                  | 550Hz ±20%                         | 1V                                 |
| 2.6  | SPL / 输出音压                 | 80±3dB                             | 1W / 0.5m; Avg. 0.8/1.0/1.2/1.5kHz |
| 2.7  | Frequency Range / 频率范围     | 200Hz~20kHz                        | —                                  |
| 2.8  | THD / 总谐波失真                | ≤5%                                | 1kHz, 1V                           |
| 2.9  | Flux Density / 磁通密度        | 1.0T                               | —                                  |
| 2.10 | Buzz & Rattle / 异常音        | No audible noise                   | 2.83V, 200Hz~20kHz                 |
| 2.11 | Weight / 重量                | 7.6g                               | —                                  |
| 2.12 | Voice Coil Diameter / 音圈直径 | Φ11.75mm                           | —                                  |
| 2.13 | Magnet / 磁铁                | Φ11×1.5t mm NdFeB                  | —                                  |
| 2.14 | Polarity / 极性              | Positive → diaphragm moves forward | —                                  |

## 3. 可靠性测试 / Reliability Test

| Item / 项目                | Condition / 条件                                      | Acceptance / 判定 |
|--------------------------|-----------------------------------------------------|-----------------|
| High Temperature / 高温    | +80±3°C, 96h; recovery 3h                           | Normal          |
| Low Temperature / 低温     | -40±3°C, 96h; recovery 3h                           | Normal          |
| Humidity / 湿热            | +40±3°C, 90~95%RH, 96h; recovery 3h                 | Normal          |
| Thermal Cycle / 温循       | -40±3°C ↔ +80±3°C, total 5 cycles; room recovery 6h | ΔSPL ≤ ±3dB     |
| Vibration / 振动           | 10~55~10Hz, 5G; 2h/axis, 3 axes                     | Normal          |
| Drop / 跌落                | 100cm free drop to 20mm board; 6 directions ×1      | Normal          |
| Load / 负载                | Rated power white-noise, 96h                        | Normal          |
| Max Power / 最大功率         | Max. power: 1min ON / 2min OFF ×10 cycles           | Normal          |
| Terminal Strength / 端子强度 | 1kg load, 15s                                       | Normal          |

## 4. 测量方式 / Measurement Method

**Standard test condition of speaker**



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

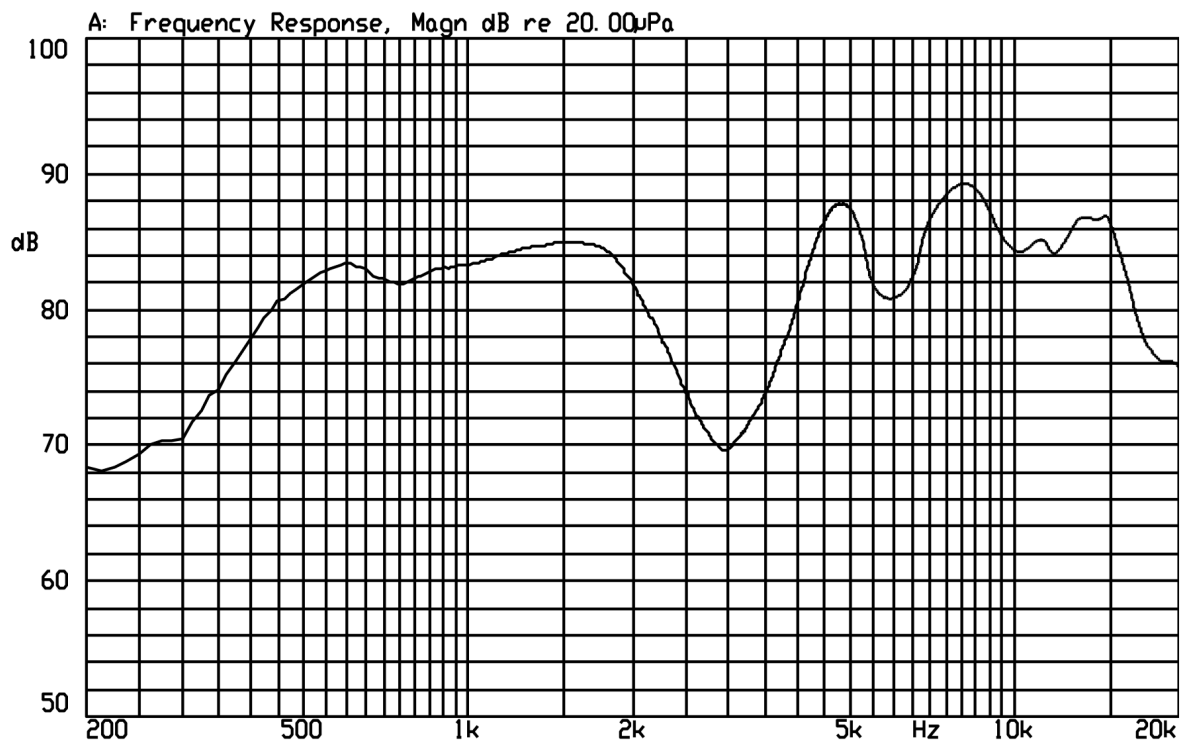
**Test Conditions / 测试条件**

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)  
Mode: TSR  
Potentiometer range: 50dB  
Sweep time: 0.5s

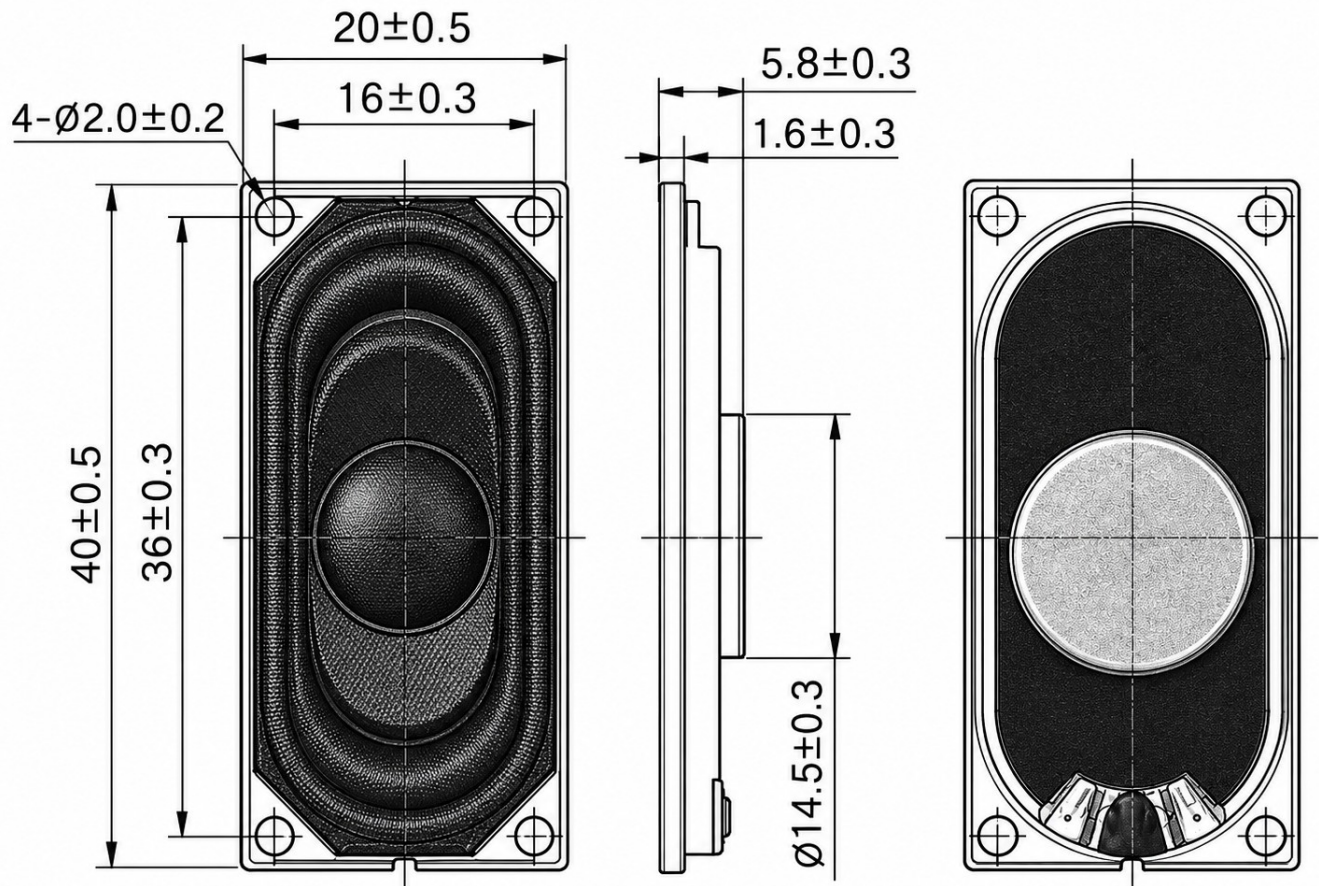
说明：测量示意图仅供参考，具体测试条件见右侧说明。 / The measurement diagram is for reference only. Detailed test conditions are shown on the right.

## 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     |
|-----|-----------------|------|-------------------|
| 8   | Shrapnel / 弹片   | 1    | Silk cloth        |
| 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    | Self-bonding wire |
| 3   | Yoke / 磁轭       | 1    | 1.0T              |
| 2   | Cloth Cone / 布盆 | 1    | Cloth             |
| 1   | Frame / 框架      | 1    | FE                |

## 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.