

# Microphone

RMIC-110-10-6035-VE-NS1

# **General Description**

Ø6.0mm x 3.5 Unidirectional Microphone





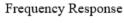


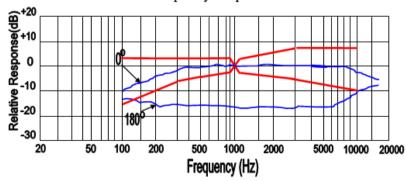


## **ELECTRICAL SPECIFICATIONS**

| Parameters                  |  | Value |        |     | Unit |
|-----------------------------|--|-------|--------|-----|------|
|                             |  | min   | center | max | Unit |
| Sensitivity                 | @ 0dB=1V/Pa, @ 1kHz                    | -41   | -38    | -35 | dB   |
| Current Consumption         | @ Vcc =2.0V,RL=2.2kΩ                   |       |        | 500 | μΑ   |
| Output Impedance            | @ f=1kHz                               |       |        | 2.2 | kΩ   |
| Decreasing Voltage          | @ V <sub>CC</sub> =3.0V ~ 2.0V         |       |        | -3  | dB   |
| Signal to Noise Ratio       | @ 1kHz S.P.L=1Pa<br>(A-Weighted Curve) | 65    |        |     | dB   |
| Operating Voltage           |  | 1.0   |        | 10  | V    |
| Input S.P.L, max            |  |       |        | 110 | dB   |
| Operating Temperature Range |  | -40   |        | +85 | °C   |
| Storage Temperature Range   |  | -40   |        | +85 | °C   |

## FREQUENCY CHARACTERISTICS





Microphone Response Tolerance Window

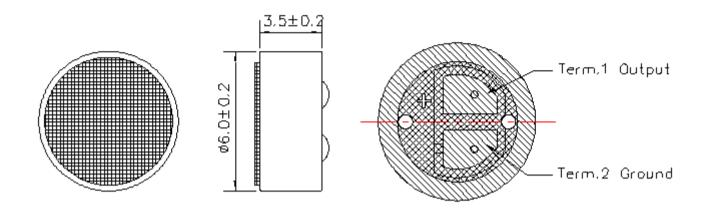
| Frequency<br>(Hz) | Lower<br>Limit(dB) | Upper<br>Limit(dB) |
|-------------------|--------------------|--------------------|
| 100               | -15                | +3                 |
| 800               | -4                 | +3                 |
| 1000              | 0                  | 0                  |
| 1200              | -4                 | +4                 |
| 3000              | -5                 | +8                 |
| 5000              | -6                 | +8                 |
| 10000             | -10                | +8                 |



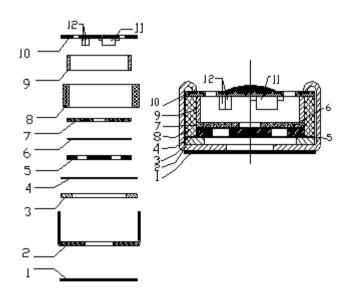
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# DIMENSIONS AND MATERIAL/STRUCTURE



Unit: mm



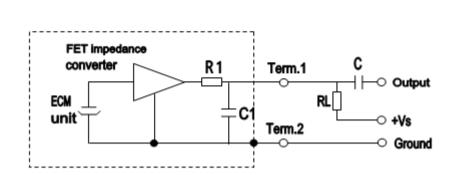
| 12  | CAP/Resistance  | $10pF + 333\Omega$ | 2   |
|-----|-----------------|--------------------|-----|
| 11  | FET             |                    | 1   |
| 10  | P.C.B           | FR-4               | 1   |
| 9   | Copper Ring     |                    | 1   |
| 8   | Chamber         |                    | 1   |
| 7   | One Hole Plate  |                    | 1   |
| 6   | Damping         |                    | 1   |
| 5   | Electret Plate  |                    | 1   |
| 4   | Spacer          |                    | 1   |
| 3   | Diaphragm       |                    | 1   |
| 2   | Case            | AL-Mg-Alloy        | 1   |
| 1   | Dustproof Gauze |                    | 1   |
| No. | Name            | Material           | QTY |



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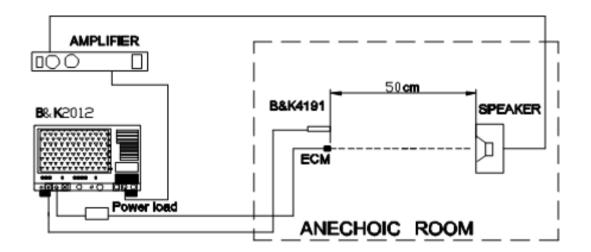
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#### **MEASUREMENT CIRCUIT**



| RL=2.2KΩ |  |
|----------|--|
| Vs =2.0V |  |
| C1=10PF  |  |
| R1=330Ω  |  |
| C=1µF    |  |
|          |  |

## **MEASUREMENT SETUP DRAWING**



## **APPROVAL**

| DRAWN BY    | AR, August 1, 2024 |
|-------------|--------------------|
| APPROVED BY | CP, August 1, 2024 |
| REVISION    | A, Initial Release |





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