

General Description

Ø9.7mm x 5.0mm, Omni-Directional Microphone

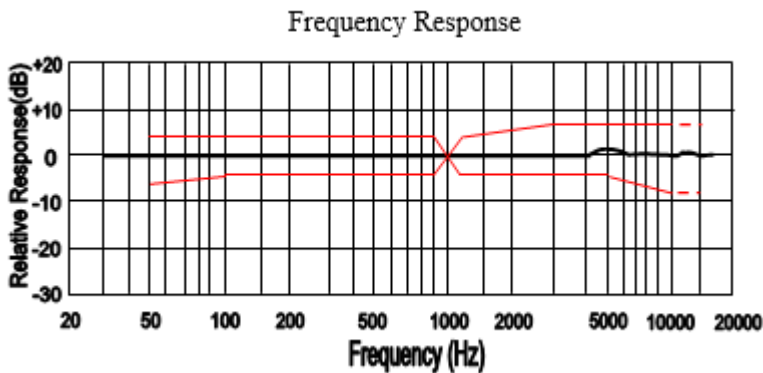


ELECTRICAL SPECIFICATIONS

| Parameters | | Value | | | Unit |
|-----------------------------|-------------------------------------|-------|--------|-----|------|
| | | min | center | max | |
| Sensitivity | @ 0dB=1V/Pa, @ 1kHz | -41 | -38 | -35 | dB |
| Current Consumption | | | | 500 | µA |
| Output Impedance | @ f=1kHz | | | 2.2 | kΩ |
| Decreasing Voltage | @ V _{CC} =3.0V ~ 2.0V | | | -3 | dB |
| Signal to Noise Ratio | @ 1kHz S.P.L=1Pa (A-Weighted Curve) | 58 | | | 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 |

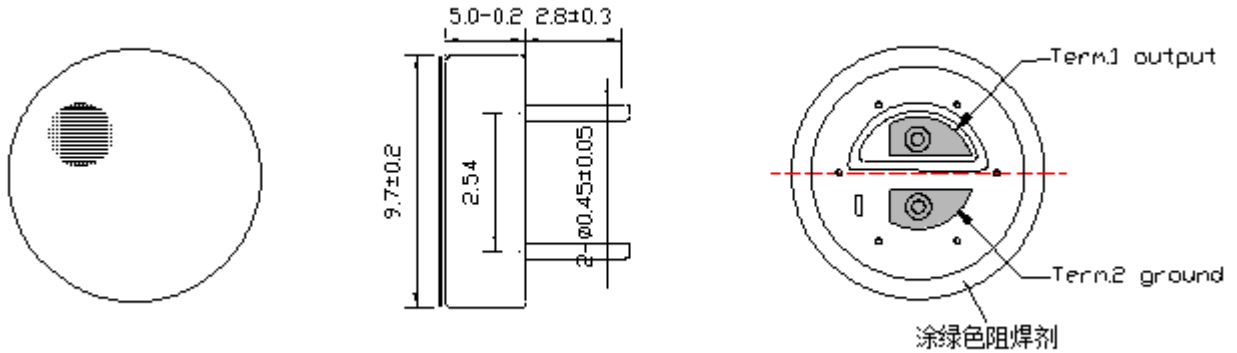
FREQUENCY CHARACTERISTICS

Microphone Response Tolerance Window

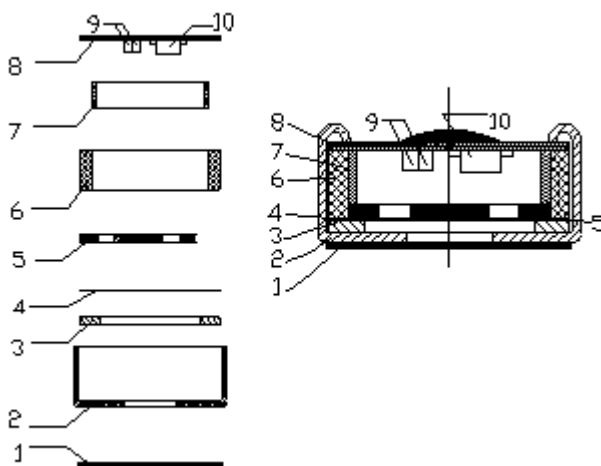


| Frequency (Hz) | Lower Limit (dB) | Upper Limit (dB) |
|----------------|------------------|------------------|
| 50 | -6 | +3 |
| 100 | -3 | +3 |
| 800 | -3 | +3 |
| 1000 | 0 | 0 |
| 1200 | -3 | +3 |
| 3000 | -3 | +8 |
| 5000 | -3 | +8 |
| 10000 | -8 | +8 |

DIMENSIONS AND MATERIAL/STRUCTURE

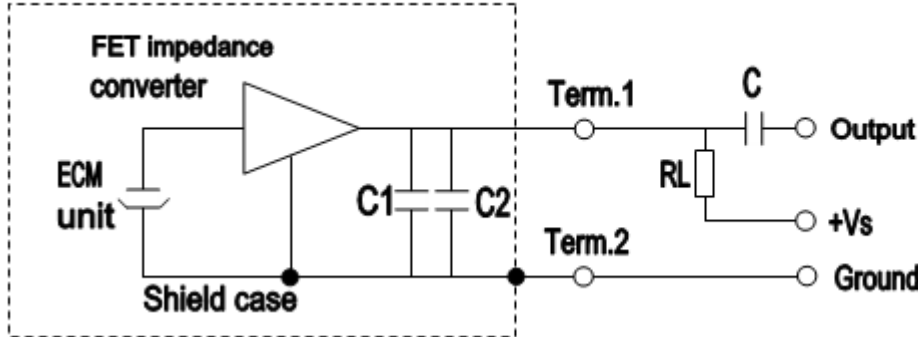


Unit: mm



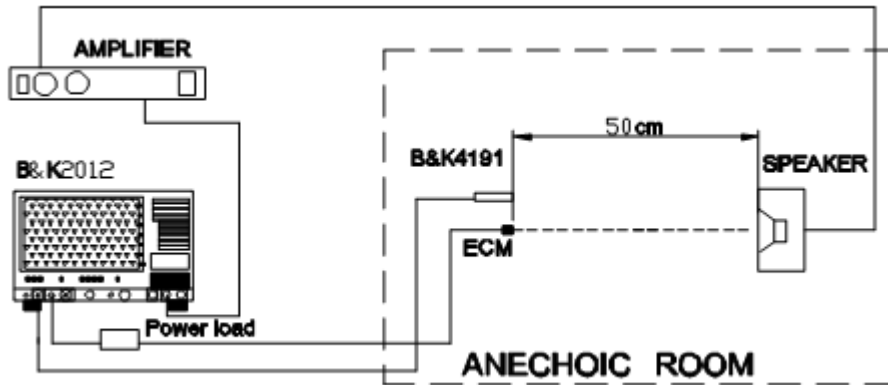
| 10 | FET | | 1 |
|-----|---------------------|-----------------|-----|
| 9 | Chip Capacitor | | 2 |
| 8 | P.C.B | FR-4 | 1 |
| 7 | Copper ring | | 1 |
| 6 | Chamber | | 1 |
| 5 | Electret Back | | 1 |
| 4 | Spacer | | 1 |
| 3 | Polarized Diaphragm | | 1 |
| 2 | Case | Al-Mg alloy | 1 |
| 1 | Felt | Non-weave cloth | 1 |
| No. | Name | Material | QTY |

MEASUREMENT CIRCUIT



| |
|--------------------|
| $R_L = 2.2K\Omega$ |
| $V_s = 2.0V$ |
| $C1 = 10PF$ |
| $C2 = 33PF$ |
| $C = 1\mu F$ |

MEASUREMENT SETUP DRAWING



APPROVAL

| | |
|-------------|-----------------------|
| DRAWN BY | AR, December 12, 2023 |
| APPROVED BY | CP, December 12, 2023 |
| REVISION | A, Initial Release |



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