

### General Description

Ø10.0mm x 4.5mm, Unidirectional Back Microphone

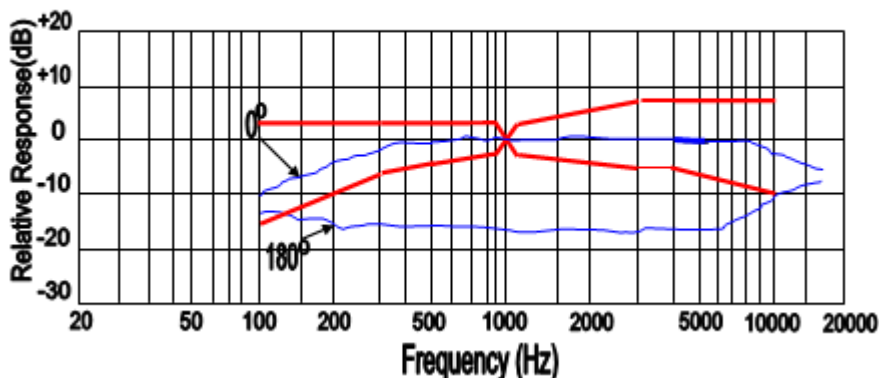


### ELECTRICAL SPECIFICATIONS

Parameters		Value			Unit
		min	center	max	
Sensitivity	@ 0dB=1V/Pa, @ 1kHz	-65	-62	-59	dB
Current Consumption	@ V <sub>CC</sub> =1.5V,RL=0.68kΩ			500	μA
Output Impedance	@ f=1kHz			0.68	kΩ
Decreasing Voltage	@ V <sub>CC</sub> =3.0V ~ 2.0V			-3	dB
Signal to Noise Ratio	@ 1kHz S.P.L=1Pa (A-Weighted Curve)	60			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

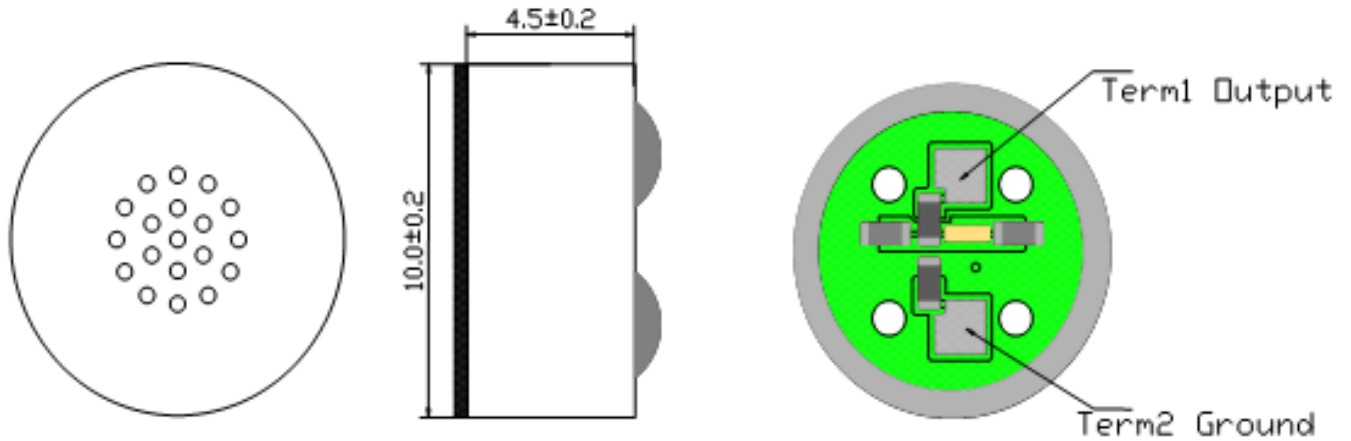
Frequency Response



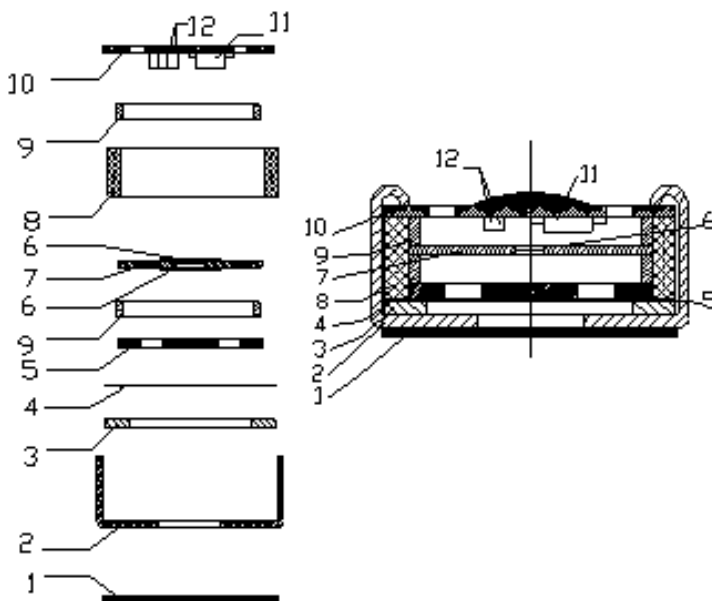
Microphone Response Tolerance Window

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

**DIMENSIONS AND MATERIAL/STRUCTURE**

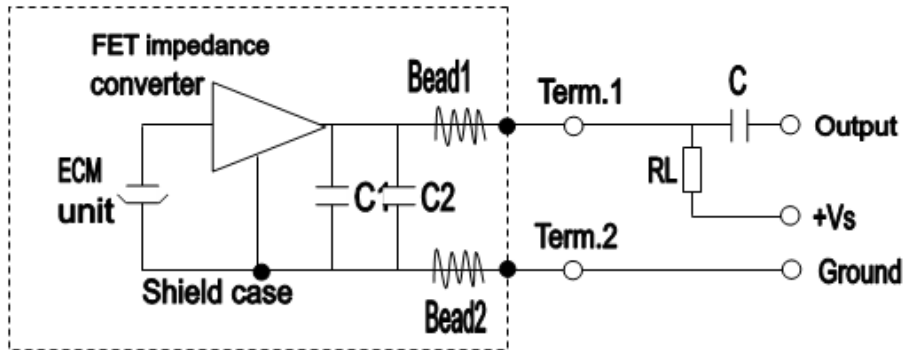


Unit: mm



12	Chip Capacitors Bead Resistor		4
11	FET		1
10	PCB	FR4	1
9	Copper Ring		2
8	Chamber		1
7	Link dump iron		2
6	Damping net		1
5	Electret Plate		1
4	Spacer		1
3	Polarized Diaphragm		1
2	Case	Al-Mg alloy	1
1	Dustproof gauze	Non-weave cloth	1
No.	Name	Material	QTY

## MEASUREMENT CIRCUIT



$$R_L = 0.68K\Omega$$

$$V_s = 1.5V$$

$$R1 = 3.3K (\pm 1\%)$$

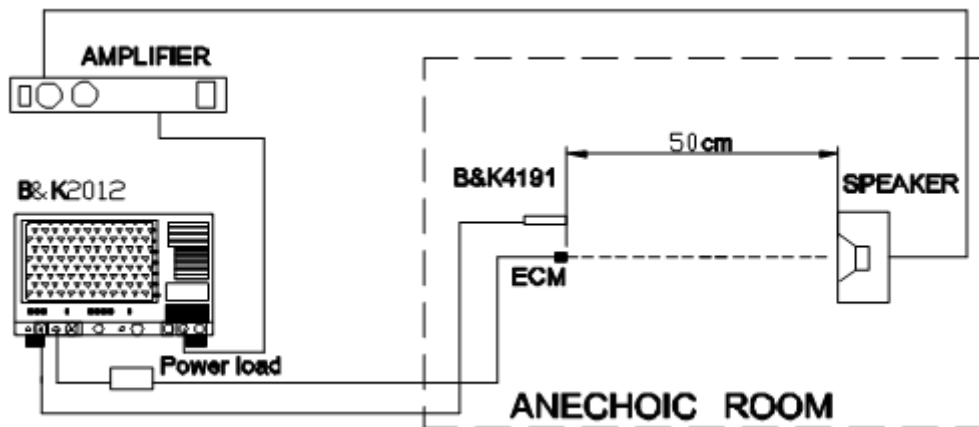
$$\text{Bead} = 1.5K$$

$$C1 = 10PF$$

$$C2 = 33PF$$

$$C = 1\mu F$$

## MEASUREMENT SETUP DRAWING



## APPROVAL

DRAWN BY	AR, Septemembr 06, 2024
APPROVED BY	CP, Septemembr 06, 2024
REVISION	A, Initial Release

