

### General Description

Ø4.0mm x 1.5mm, Noise Canceling Microphone



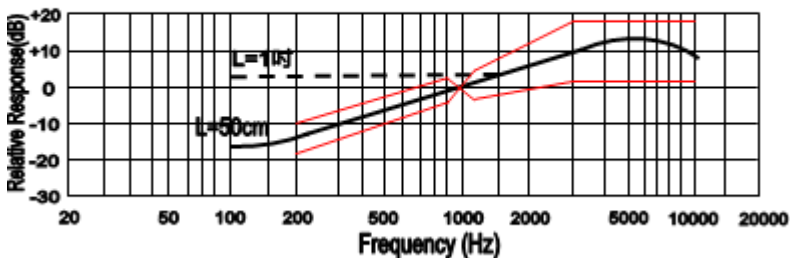
### ELECTRICAL SPECIFICATIONS

Parameters		Value			Unit
		min	center	max	
Sensitivity	@ 0dB=1V/Pa, @ 1kHz	-45	-42	-39	dB
Current Consumption	@ Vcc =2.0V,RL=2.2kΩ			500	μA
Output Impedance	@ f=1kHz			5.5	kΩ
Decreasing Voltage	@ Vcc=3.0V ~ 2.0V			-3	dB
Signal to Noise Ratio	@ 1kHz S.P.L=1Pa (A-Weighted Curve)	55			dB
Operating Voltage		1.4		5	V
Input S.P.L, max				110	dB
Operating Temperature Range		-40		+85	°C
Storage Temperature Range		-40		+85	°C

### FREQUENCY CHARACTERISTICS

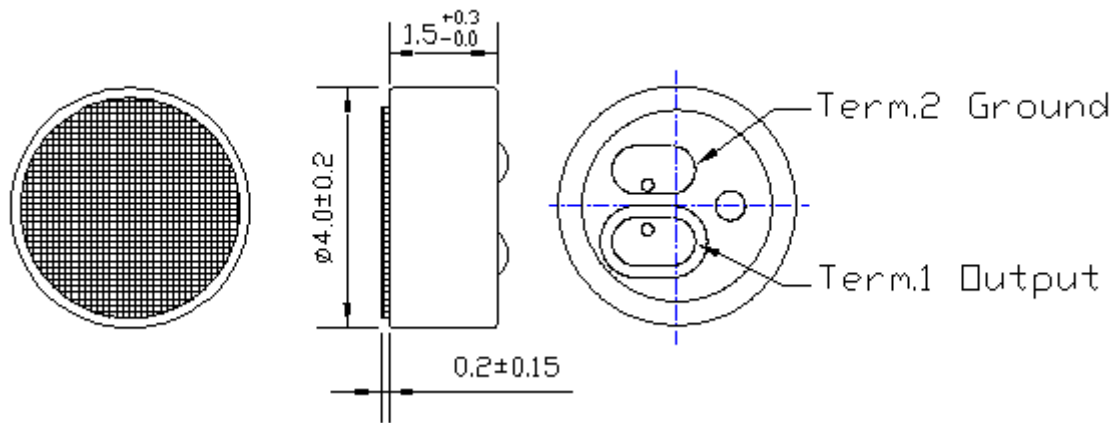
Microphone Response Tolerance Window

Frequency Response

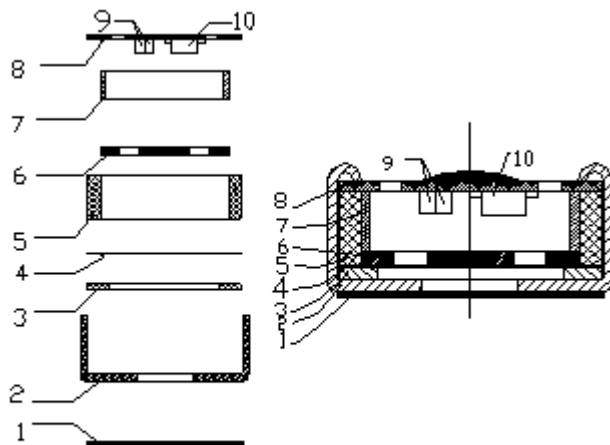


Frequency (Hz)	Lower Limit(dB)	Upper Limit(dB)
200	-18	-10
800	-6	+2
1000	0	0
1200	-4	+4
3000	+2	+18
5000	+2	+18
10000	+2	+18

## DIMENSIONS AND MATERIAL/STRUCTURE

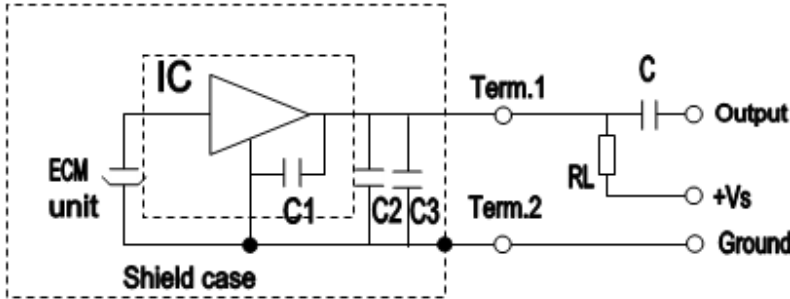


Unit: mm



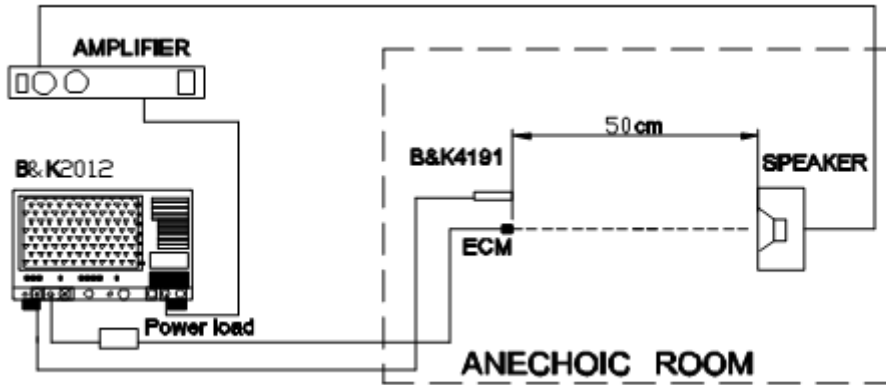
10	FET	Build in 10 PF capacitors	1
9	capacitors		2
8	PCB	FR4	1
7	Copper ring		1
6	Electret Plate		1
5	Chamber		1
4	Spacer		1
3	Diaphragm		1
2	Case	Al-Mg alloy	1
1	Dustproof gauze	Non-weave cloth	1
No.	Name	Material	QTY

### MEASUREMENT CIRCUIT



$R_L = 2.2K\Omega$
$V_s = 3.0V$
$C_1 = 10PF$
$C_2 = 33PF$
$C_3 = 22NF$
$C = 1\mu F$

### MEASUREMENT SETUP DRAWING



### APPROVAL

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



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