Microphone

RMIC-110-10-9750-NS1

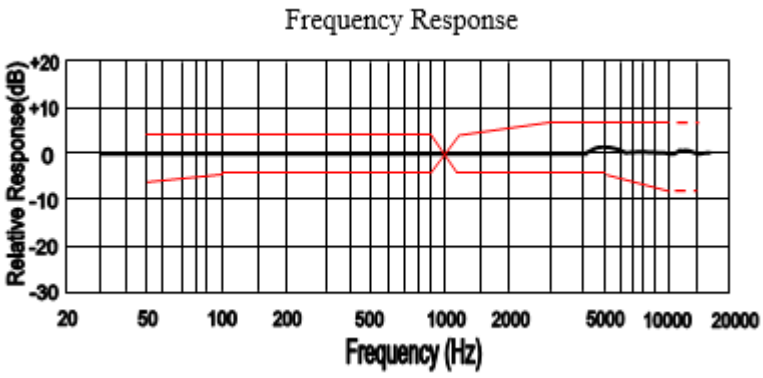
General Description

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

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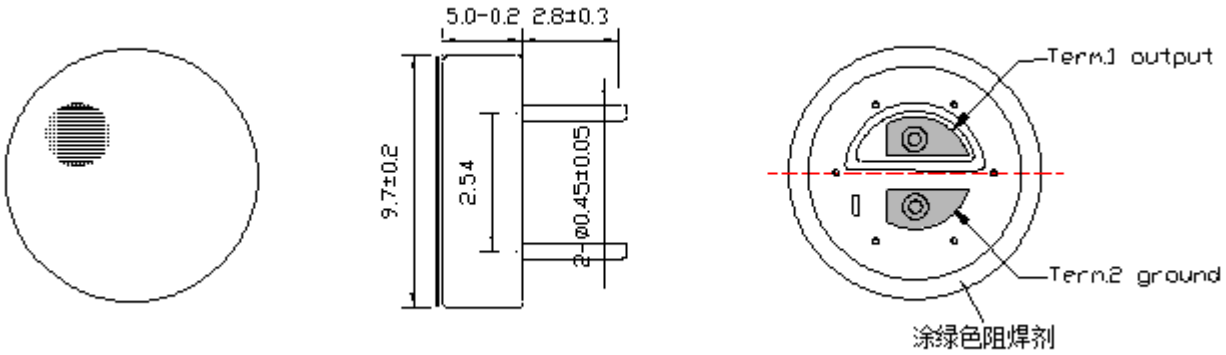
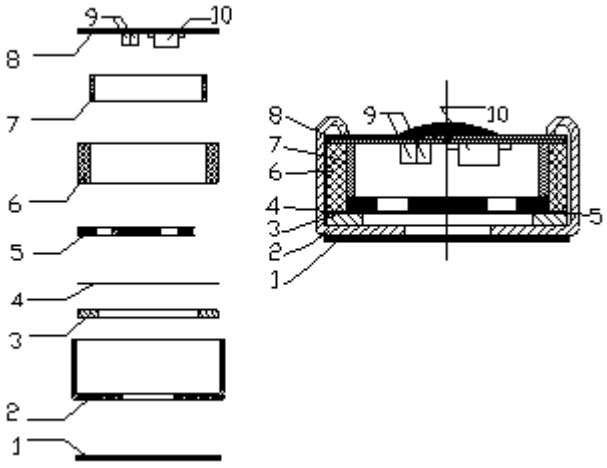
DIMENSIONS AND MATERIAL/STRUCTURE



Unit: mm



No.	Name	Material	QTY
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

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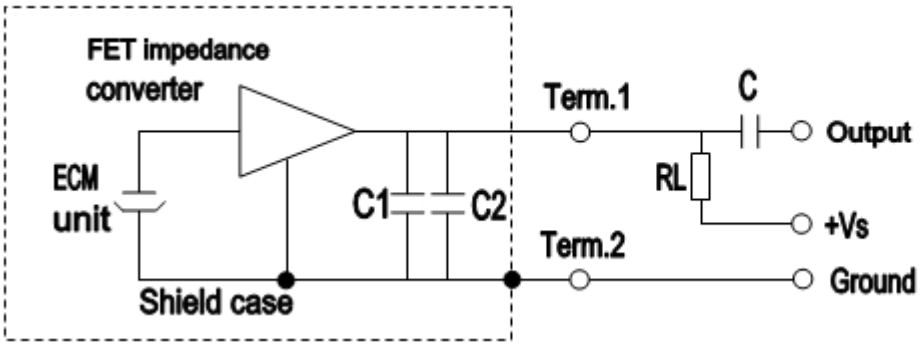
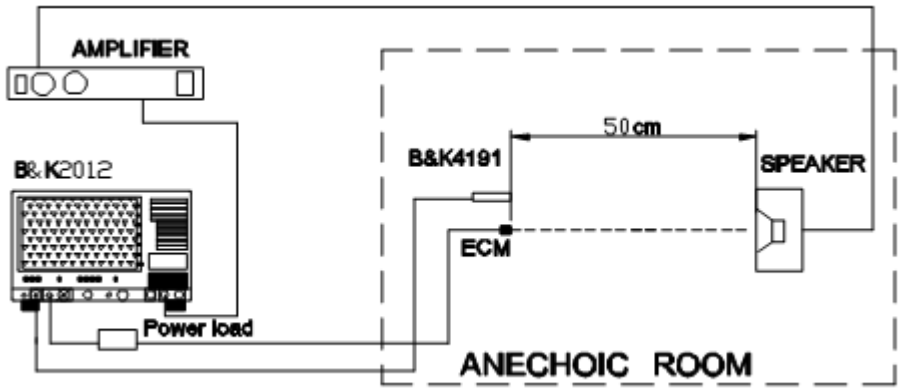
MEASUREMENT CIRCUIT



R_L=2.2KΩ
V_S =2.0V
C1=10PF
C2=33PF
C=1μF

MEASUREMENT SETUP DRAWING



APPROVAL

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