Microphone
RMIC-115-10-4013-NS1

General Description

Ø4.0mm x 1.3mm, Omni-Directional Microphone

REACH
COMPLIANCE

RoHS Compliant

ELECTRICAL SPECIFICATIONS

Parameters		Value			Unit
		min	center	max	
Sensitivity	@ 0dB=1V/Pa, @ 1kHz	-45	-42	-39	dB
Current Consumption	@ V$_{CC}$ =2.0V,RL=2.2kΩ			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				115	mm
Operating Temperature Range		-40		+85	˚C
Storage Temperature Range		-40		+85	˚C

FREQUENCY CHARACTERISTICS

Frequency Response
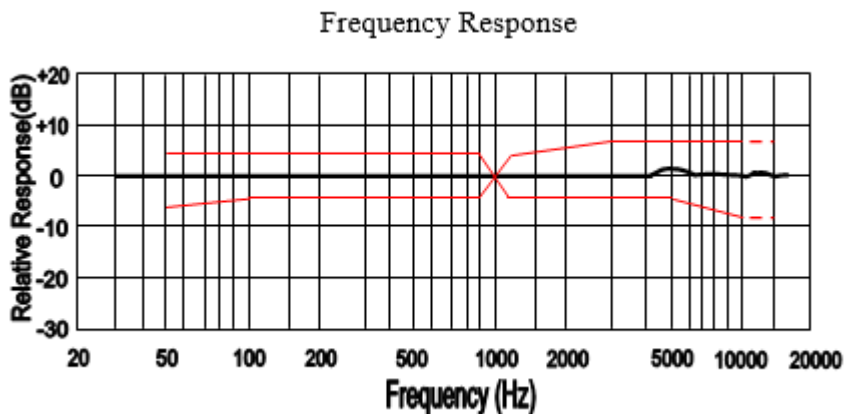
Frequency (Hz)	Lower Limit(dB)	Upper Limit(dB)
50	-6	+3
100	-3	+3
800	-3	+3
1000	0	0
1200	-3	+3
3000	-3	+8
5000	-4	+8
10000	-8	+8

DIMENSIONS AND MATERIAL/STRUCTURE
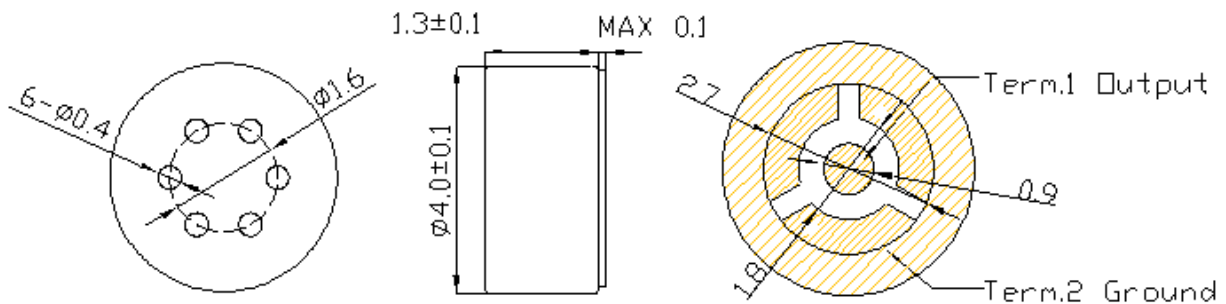
Unit: mm   **Tolerance:±0.1mm**

Recommend Assembly Weld Plate
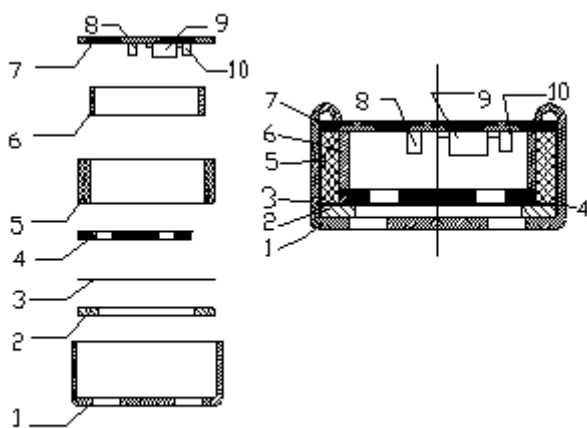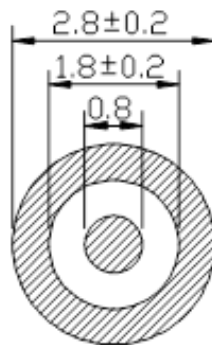
No.	Name	Material	QTY
10	RES		1
9	FET		1
8	Chip Capacitor		1
7	PCB	FR4	1
6	Copper ring		1
5	Chamber		1
4	Electret Plate		1
3	Spacer		1
2	Diaphragm		1
1	Case		

MEASUREMENT CIRCUIT
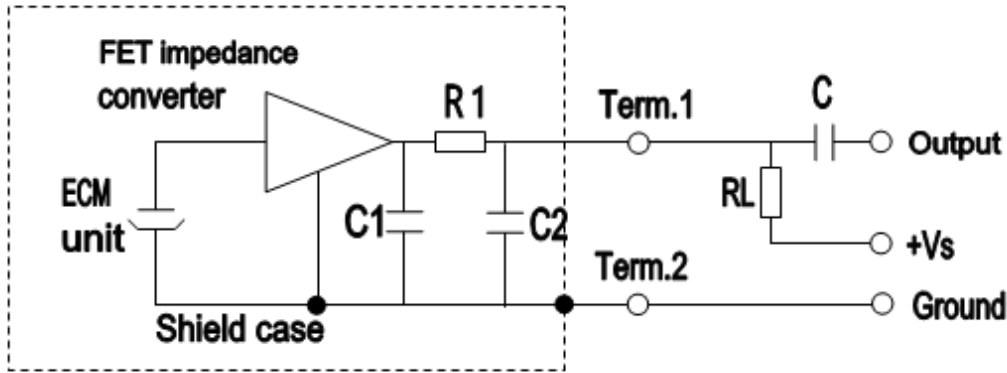
$R_L = 2.2K\Omega$	
$V_S = 2.0V$	
$C1 = 10pF$	
$C2 = 33pF$	
$R1 = 330\Omega$	
$C = 1\mu F$	

MEASUREMENT SETUP DRAWING
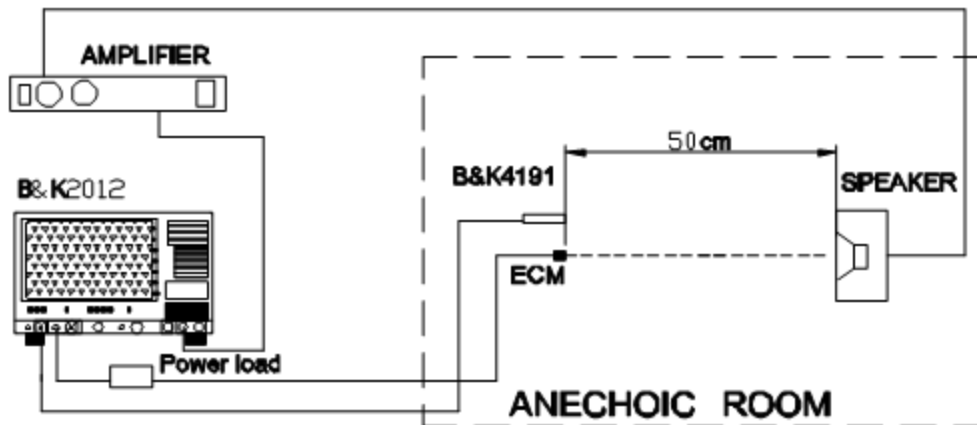
APPROVAL

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