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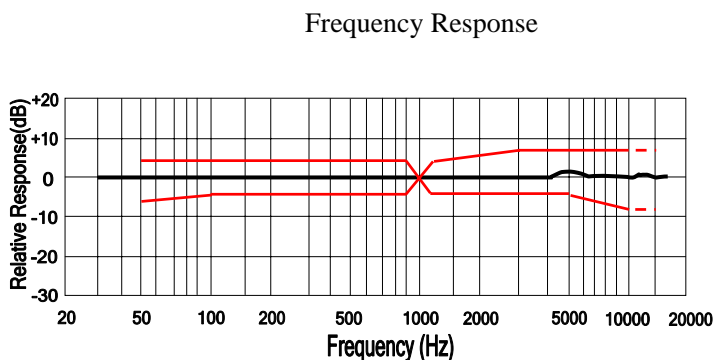
1. Scope This specification applies electret condenser microphone

2. Model No. PVM-6027-4P423S

3. **Name:** Omnidirectional Electret Condenser Microphone (Temp=20±2°C Room Humidity=65±5%)

No	Parameter	Symbol	Condition	Limits			Unit
				Min.	Center	Max.	
3.1	Sensitivity	S	0dB=1V/Pa, at 1kHz	-45	-42	-39	dB
3.2	Output impedance	Z out	f=1kHz			2.2	K Ω
3.3	Current Consumption	I _{DSS}	V _{CC} =3.0V, R _L =2.2K Ω			500	μA
3.4	Signal to Noise Ratio	S/N	at 1kHz S.P.L=1Pa (A-Weighted Curve)	58			dB
3.5	Decreasing Voltage	Δ S-VS	V _{CC} =1.0V to3.0V			-3	dB
3.6	Operating Voltage			1.0		10	V
3.7	Maximum input S.P.L					110	dB

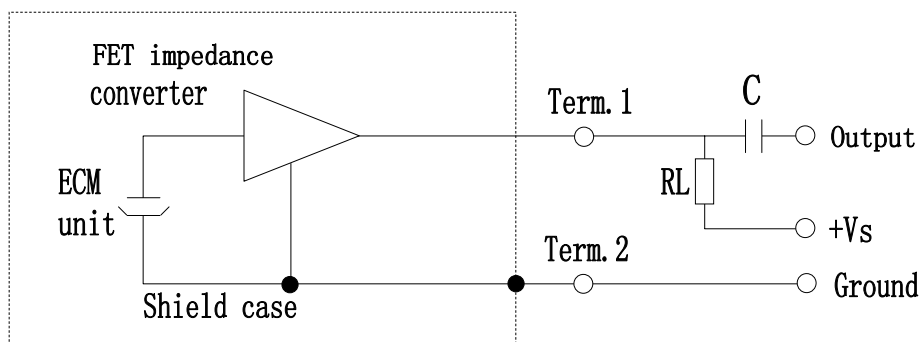
3.8 Typical Frequency Response Curve



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

3.9 Measurement Circuit



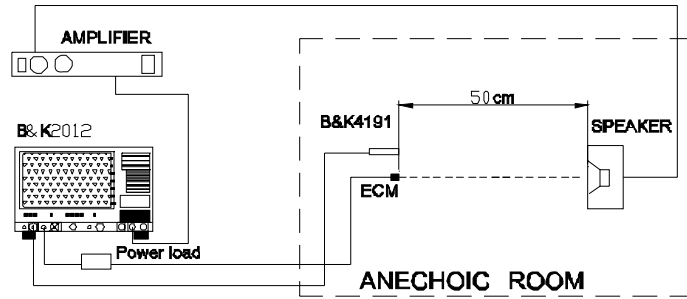
Explain

R_L=2.2K Ω

V_s =3.0V

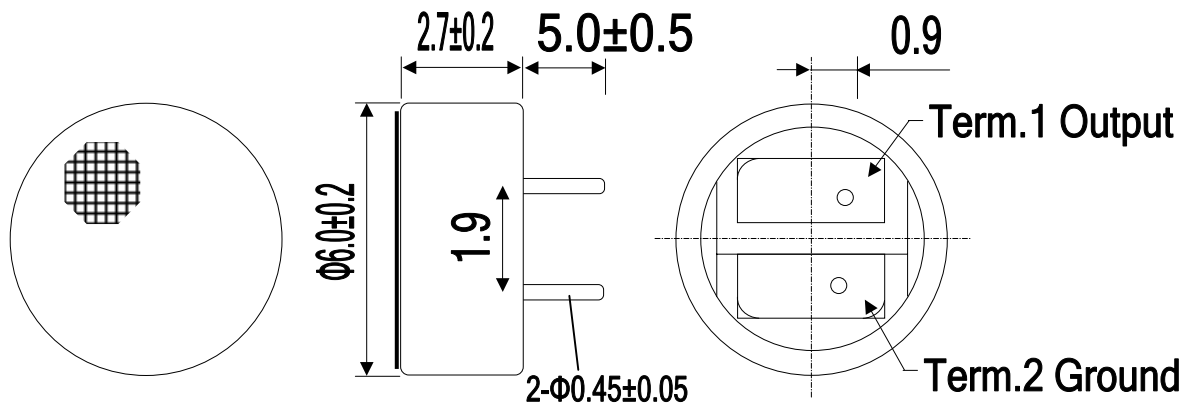
C=1μF

4. Test Setup Drawing

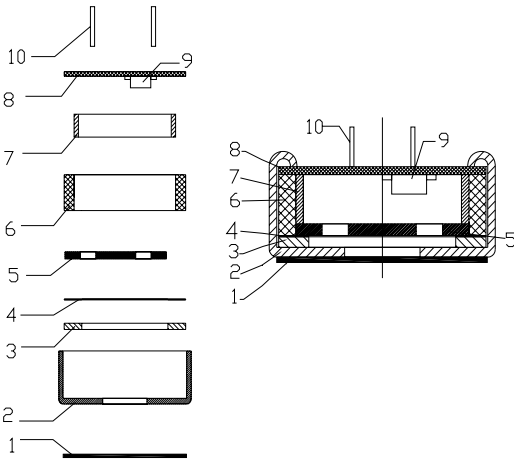


5 Appearance And Dimension

Unit: mm



6. Drawing



No.	Name	material	QTY	Remark
10	PIN	Copper	2	
9	FET		1	2SK3857/202
8	P.C.B		1	FR-4
7	Copper ring	Copper tube	1	
6	HOUSING CHAMBER	Gather formaldehyde	1	
5	Foil ELECTRET	Copper blank	1	
4	SPACER	Mylar	1	
3	POLARIZED DIAPHRAGM	DUPONT	1	
2	CASE	AL	1	
1	FELT	Fabric cloth	1	

7. Temperature Conditions

Storage Temperature Range	Operation Temperature Range
-40°C ~ +75°C	-40°C ~ +75°C

8. Terminal Mechanical Strength

Terminal mechanical strength to be no interference in operation after pulled the terminal with 1kg strength for 1 minute.

9. **Reliability Test**

After any following tests, the sensitivity of the microphone to be within $\pm 3\text{dB}$ of initial sensitivity after 3 hours of conditioning at 20°C .

9-1 Vibration

Frequency1 : 10Hz~55Hz
Amplitude : 1.52mm
Change of Frequency : 1 octave/min
2 hours in each of 3 axes

9-2 Dry Heat / Cold

$+70^\circ\text{C}$ / -20°C for 72 hours

9-3 Damp Heat

90%~95%RH, $+40^\circ\text{C}$ for 240 hours

9-4 Temperature Cycles

-20°C \longleftrightarrow 25°C \longleftrightarrow 70°C \longleftrightarrow -20°C
(2h) (1h) (2h) (1h) (2h) (2h) \times 10 cycles

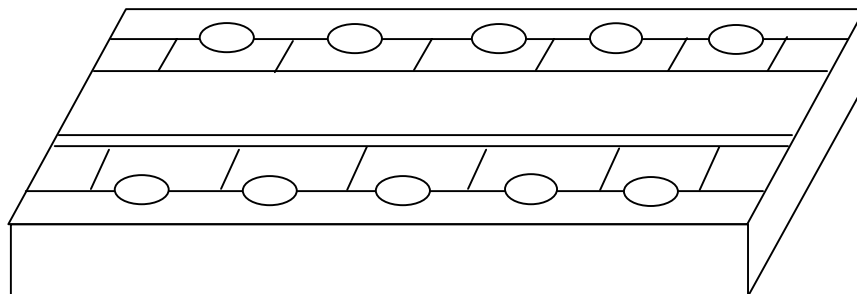
9-5 Packing Drop Test

Height: 1m
Procedure: 5 times from each of 3 axis's

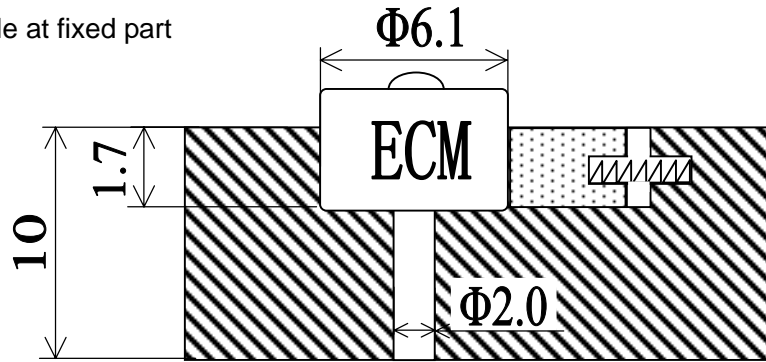
10.

Soldering Condition

- 10-1** The soldering copper of a small type of 13~20W shall be applied.
- 10-2** The temperature of the working surface of the soldering copper shall be below 320°C .
- 10-3** ECM shall be soldered fixed on the metal block (heat sink), which has the higher radiation effects said heat sink shall contact with of ECM.
- 10-4** The soldering time for each terminal shall be 1~2 sec.
- 10-5** The pinhole after soldering shall be avoided.
- 10-6** ECM may easily destroyed by the static electricity and the countermeasure for eliminating the static electricity (the ground for soldering copper, for worktable and for human body) shall be executed.
- 10-7** Heat Sink
Shape of heat sink



Shape of hole at fixed part



Packing Introduction

一. DIMENSION:(LENGTH*WIDTH*HEIGHT)

- a) SMALL PACKET
100mm*100mm*5mm
- b) MID PACKET:
205mm*105mm*50mm
- c) PAPER CASE:
550mm*230mm*235mm

二. EQUIPMENT

- a) ADHENSIVE TAPE MACHINE
- b) AUTO PACKER

三. PACKING INTRODUCTION

- a) 100PCS/ INHALE PLASTIC BOX
- b) 1200PCS/MID PACKET
- c) 24000PCS/PAPER CASE

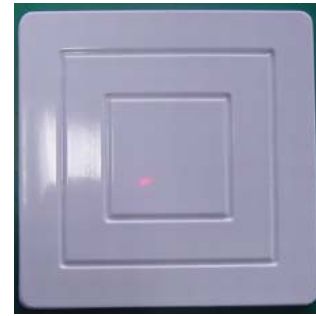
四. QUANTITY INTRODUCTION

- a) 1PC=0.2g
- b) NET WEIGHT
PAPER CASE: 4.8kg
GROSS WEIGHT: 6.8kg

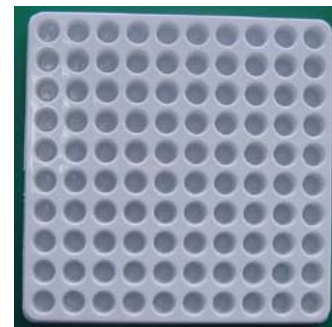
五. LABEL STIPULATION

- a. LABELEDEVERY BOXES
(SEE THE CHART)
- b. DIMENSIONS SHOULD BE SEEN
EASILY

Packing chart



X1



100PCS

X12



1200PCS

X20



24000PCS