Specification For Approval

承 認 書

客　　戶 （Customer）			
品　　名 （Product Name）			
機　　種 （Model No.）			
客戶料號 （Customer Parts No.）			
供應商料號（Supplier Model No.）	PVM4530B-4P423S028		
客戶承認簽章 Customer Approval Signature	In Charge	Checked	Approval

Revision History			
Version	Date	Description	Author
V 00	2022.01.12	creation	VIVIAN

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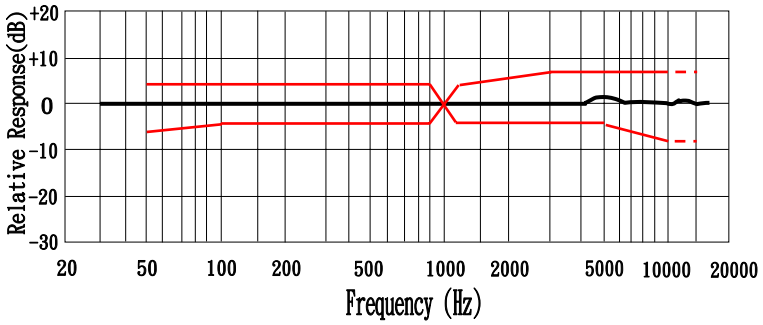
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1.	Name：	Omni directional Back Electret Condenser Microphone	
2.	Model No.	PVM4530B-4P423S028	PIN=2.8

3. Electrical characteristics （Temp=20±2℃Room Humidity=65±5%）

	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	KΩ
3.3	Current Consumption	I_{DSS}	V_{CC} =3.0V,R_L=2.2KΩ			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	△S	V_{CC}=3.0V to2.0V			-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						

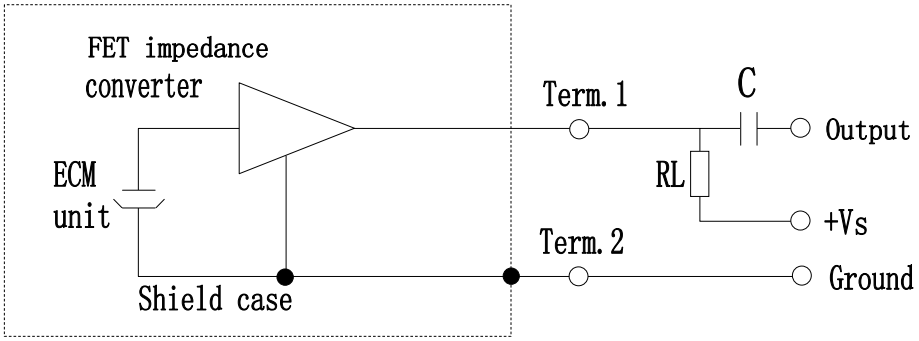
Typical Frequency Response Curve



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



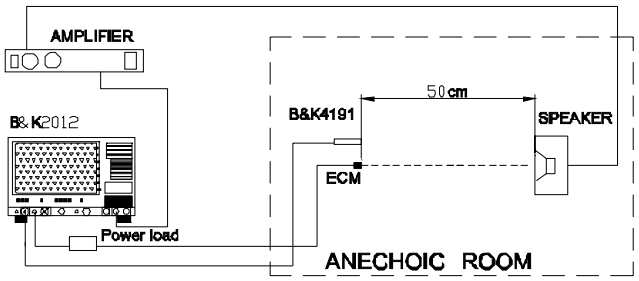
R_L=2.2KΩ

Vs =3.0V

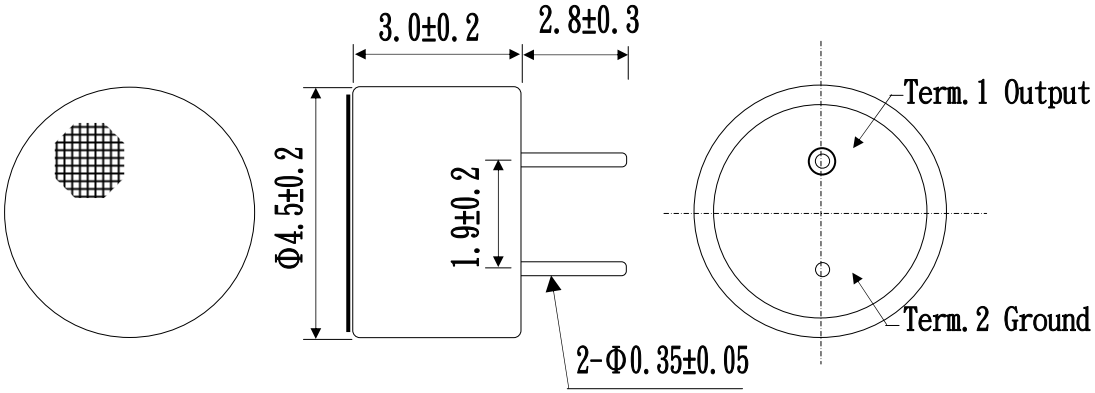
C=1μF

4. Test Setup Drawing

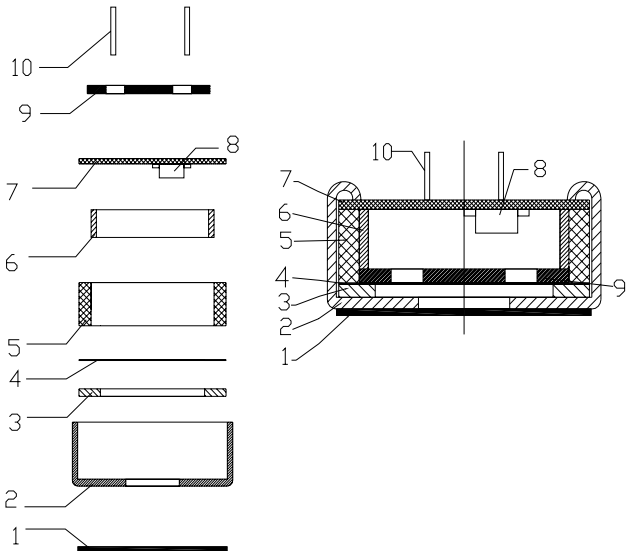
L=50CM



5. Appearance And Dimension **Unit：mm**



6. Drawing



No.	Name	material	QTY	Remark
10	PIN	Copper	2	
9	ELECTRET BACK		1	
8	FET		1	
7	P.C.B		1	FR-4
6	Copper ring		1	
5	HOUSPING CHAMBER		1	
4	SPACER		1	
3	POLARIZED DIAPHRAGM		1	
2	CASE	Al-Mg alloy	1	
1	FELT	Fabric cloth	1	

7. Temperature Conditions

Storage Temperature Range	Operation Temperature Range
-40℃ ~ +85℃	-40℃ ~ +85℃

Note: Store in electronic warehouse.

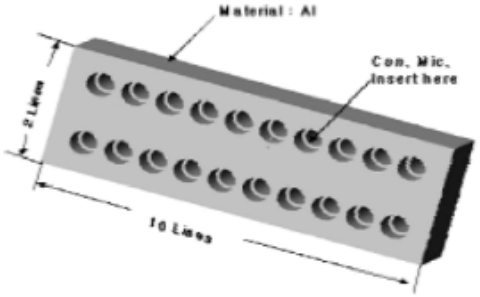
8. Terminal Mechanical Strength

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

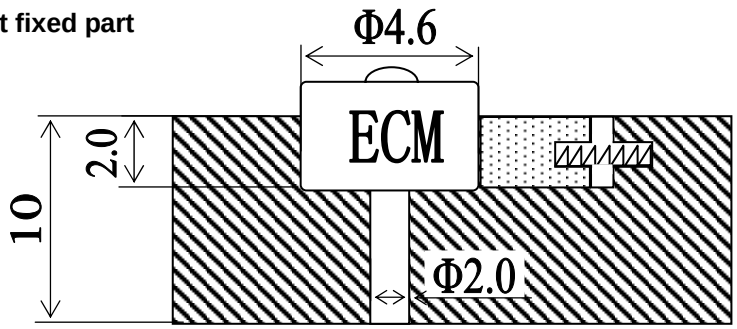
9.	**Reliability Test** After each of following test, the sensitivity of the microphone should be within ±3dB of initial sensitivity after 3hours of conditioning at 20℃. 1. Vibration Test Frequency : 10Hz~55Hz Amplitude : 1.52mm Change of Frequency : 1 octave/min 2 hours in each of axes 2. High Temperature Test +85℃ for 240 hours. 3. Low Temperature Test -40℃ for 240 hours. 4. Humidity Test 90%～95%RH,+40℃ for 240 hours. 5. Thermal shocking test –40°C, 30 minutes ↔ +80°C, 30 minutes, repeated 32 cycles → room temperature, 3 hours. 6.Temperature Cycles -40℃ ⟷ +20℃ ⟷ +85℃ ⟷ +20℃ ⟷ -40℃ (2h) (0.5h) (2h) (0.1h) (2h) (0.5h) (2h) (0.5h) (2h) for 5 cycles. 7. Packing Drop Test Height：1.5m Procedure: 5 times from each of axes 8. Electrostatic discharge Tested to IEC61000-4-2 level 3： a) Contact discharge The microphone shall operate normally after 10 discharges to is 6KV DC and the discharge network is 150pF and 330Ω. b) Air discharge The microphone shall operate normally after 10 discharges to is 8KV DC and the discharge network is 150pF and 330Ω
10.	**Soldering Condition** **1.** We suggest using anti-static welding machine which can control soldering temperature automatically. **2.** Soldering temperature should be controlled under 320℃ and soldering time for each terminal should be 1~2 sec.. **3.** Microphone should be fixed on the metal block (heat sink), which has high radiation effects, and heat sink shall contact with MIC tightly. **4.** Microphone may easily be destroyed by the static electricity and the countermeasure for eliminating the static electricity shall be executed (worktable and human body shall be ground connection).

5. Heat Sink

Shape of heat sink



10. **Shape of hole at fixed part**



11.

Packing Introduction	**Packing chart**
DIMENSION:(LENGTH*WIDTH *HEIGHT) a) SMALL PACKET 100mm*100mm*7mm b) MID PACKET: 205mm*105mm*50mm c) PAPER CASE: 550mm*230mm*235mm EQUIPMENT d) ADHENSIVE TAPE MACHINE e) AUTO PACKER PACKING INTRODUCTION f) 100PCS/ INHALE PLASTIC BOX g) 1400PCS/MID PACKET h) 28000PCS/PAPER CASE QUANTITY INTRODUCTION i) 1PC=0.1g j) NET WEIGHT：2.8kg GROSS WEIGHT：5.8kg LABEL STIPULATION LABELEDEVERY BOXES (SEE THE CHART) DIMENSIONS SHOULDBE SEEN EASILY.	