



# 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.)	<b>PVM6050-E364S</b>		
客戶承認簽章 Customer Approval Signature	<b>In Charge</b>	<b>Checked</b>	<b>Approval</b>

Revision History			
Version	Date	Description	Author
V 00	2019.10.28	creation	VIVIAN

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Design :     VIVIAN     Checked :     VIVIAN     Approval :     VIVIAN

# VECO VANSONIC ENTERPRISE CO.,LTD.

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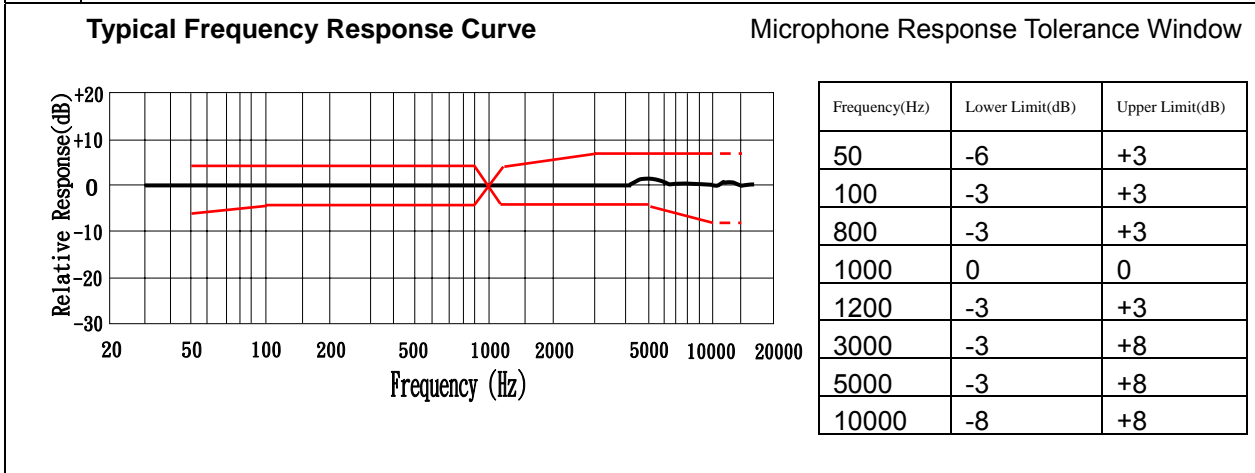
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1.	Name :	Omni directional Film Electret Condenser Microphone
2.	Model No.	PVM6050-E364S

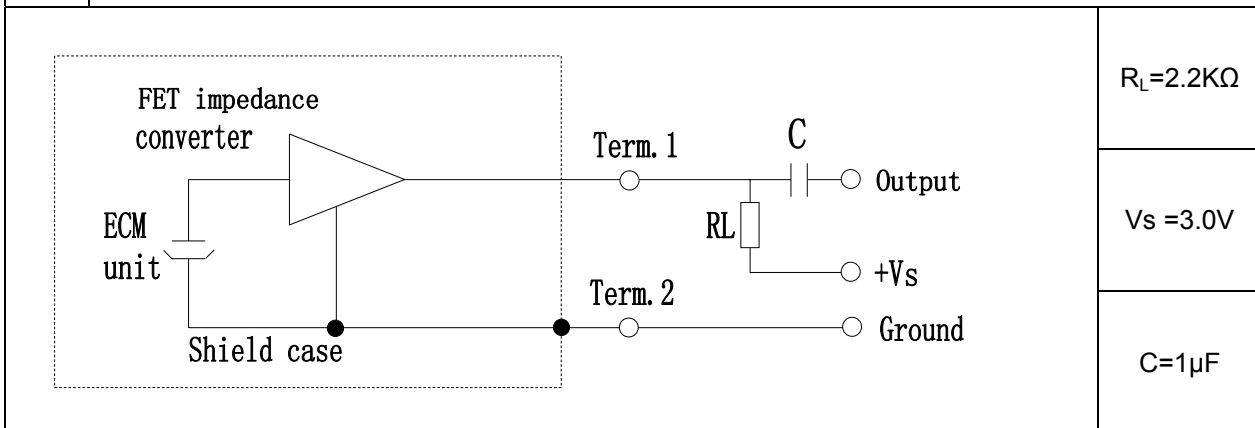
**3. Electrical characteristics** (Temp=20±2°C Room Humidity=65±5%)

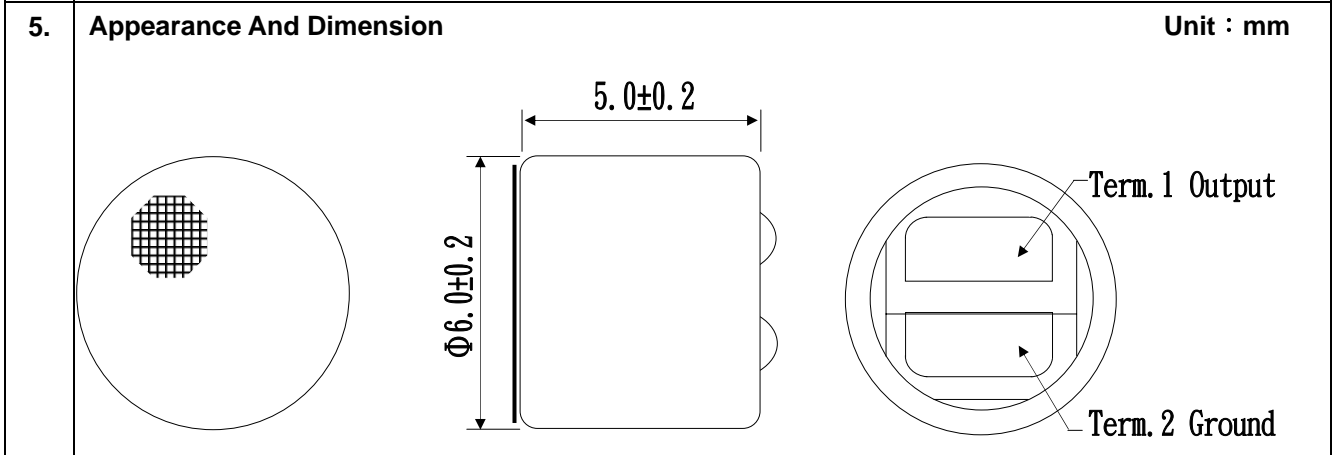
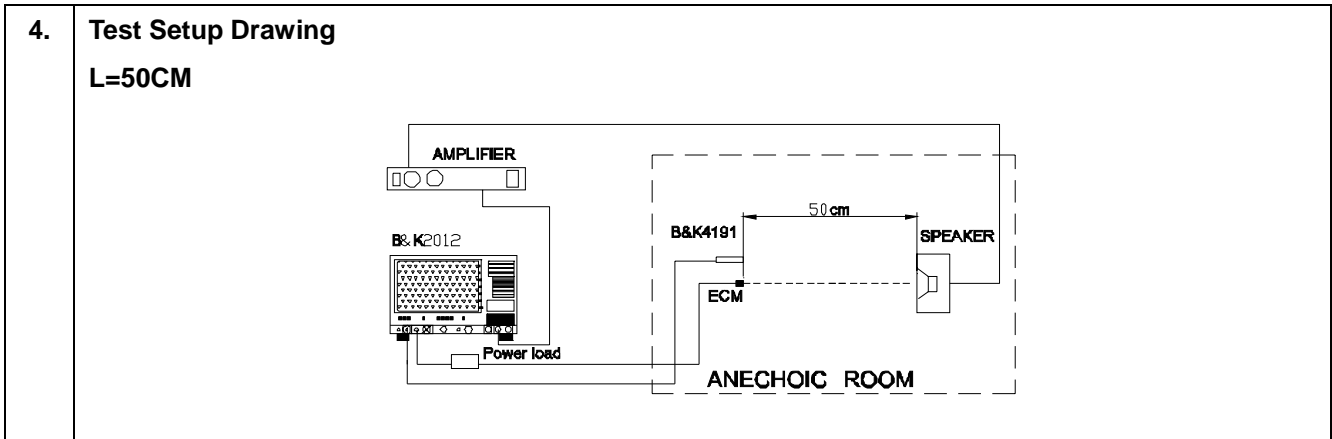
	Parameter	Symbol	Condition	Limits			Unit
				Min.	Center	Max.	
3.1	Sensitivity	S	0dB=1V/Pa · at 1kHz	-40	-36	-32	dB
3.2	Output impedance	Z out	f=1kHz			2.2	KΩ
3.3	Current Consumption	I <sub>DSS</sub>	V <sub>CC</sub> =3.0V,R <sub>L</sub> =2.2KΩ			500	μA
3.4	Signal to Noise Ratio	S/N	at 1kHz S.P.L=1Pa (A-Weighted Curve)	58			dB
3.5	Decreasing Voltage	ΔS	V <sub>CC</sub> =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



3.9 Measurement Circuit





**6. Drawing**

9	FET		1	
8	P.C.B		1	FR-4
7	Copper ring		1	
6	CHAMBER		1	
5	ELECTRETPLATE		1	
4	SPACER		1	
3	DIAPHRAGM		1	
2	CASE	Al-Mg alloy	1	
1	FELT		1	
No.	Name	material	QTY	Remark

**7. Temperature Conditions**

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

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  $\pm 3\text{dB}$  of initial sensitivity after 3 hours of conditioning at  $20^\circ\text{C}$ .

1. Vibration Test

Frequency :  $10\text{Hz}\sim 55\text{Hz}$

Amplitude :  $1.52\text{mm}$

Change of Frequency : 1 octave/min

2 hours in each of axes

2. High Temperature Test

$+75^\circ\text{C}$  for 240 hours.

3. Low Temperature Test

$-40^\circ\text{C}$  for 240 hours.

4. Humidity Test

$90\%\sim 95\%\text{RH}$ ,  $+60^\circ\text{C}$  for 240 hours.

5. Thermal shocking test

$-40^\circ\text{C}$ , 30 minutes  $\leftrightarrow$   $+70^\circ\text{C}$ , 30 minutes, repeated 32 cycles  $\rightarrow$  room temperature, 3 hours.

6. Temperature Cycles

$-40^\circ\text{C}$   $\leftrightarrow$   $+20^\circ\text{C}$   $\leftrightarrow$   $+75^\circ\text{C}$   $\leftrightarrow$   $+20^\circ\text{C}$   $\leftrightarrow$   $-40^\circ\text{C}$   
(2h) (0.5h) (2h) (0.1h) (2h) (0.5h) (2h) (0.5h) (2h) for 5 cycles.

7. Packing Drop Test

Height :  $1.5\text{m}$  Procedure: 5 times from each of axes

8. Electrostatic discharge

Tested to IEC61000-4-2 level 3 :

a) Contact discharge

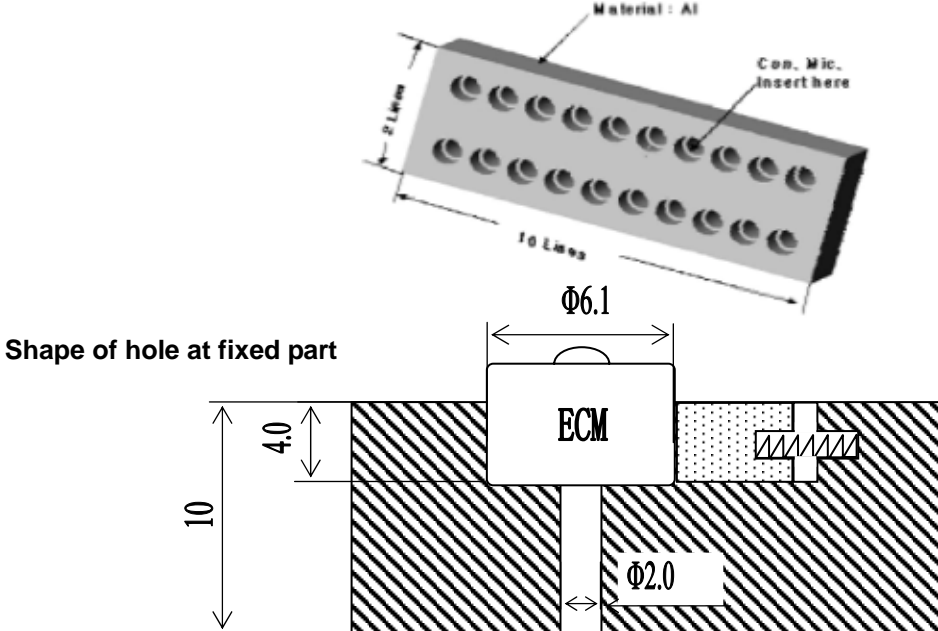
The microphone shall operate normally after 10 discharges to is  $6\text{KV DC}$  and the discharge network is  $150\text{pF}$  and  $330\Omega$ .

b) Air discharge

The microphone shall operate normally after 10 discharges to is  $8\text{KV DC}$  and the discharge network is  $150\text{pF}$  and  $330\Omega$

**10. Soldering Condition**

1. We suggest using anti-static welding machine which can control soldering temperature automatically.
2. Soldering temperature should be controlled under  $320^\circ\text{C}$  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).

10.	<p>5. Heat Sink</p> <p>Shape of hole at fixed part</p> 	Shape of heat sink
11.	<p><b>Packing Introduction</b></p> <p>DIMENSION:(LENGTH*WIDTH *HEIGHT)</p> <p>Anti-Static Foam: 80mm*80mm*2mm</p> <p>SMALL BOX 85mm*85mm*10mm</p> <p>MIDDLE BOX: 170mm*85mm*50mm</p> <p>CARTON SIZE: 550mm*230mm*235mm</p> <p>QUANTITY AND WEIGHT</p> <p>100PCS/SMALL BOX</p> <p>1000PCS/MID BOX</p> <p>30000PCS/CARTON</p> <p>1PC=0.3g</p> <p>NET WEIGHT : 9.0kg</p> <p>GROSS WEIGHT : 12.0kg</p> <p>LABEL STIPULATION</p> <p>CONTENTS SHOULD BE SEEN CLEAR.</p>	<p><b>Packing chart</b></p> 