



Specification For Approval

承認書

客 戶 (Customer)			
品 名 (Product Name)	ECM		
機 種 (Model No.)			
客戶料號 (Customer Parts No.)			
供應商料號 (Supplier Model No.)	PVM-9750UB-AC373S		
客戶承認簽章 Customer Approval Signature	In Charge	Checked	Approval

Revision History			
Version	Date	Description	Author
V 001	2011.12.07	Creation	VIVIAN

☐ 紘立企業有限公司

E-mail: vecot@veco.com.tw

Vansononic Enterprise Co., Ltd.

Tel: +886-2-2267 2389

Fax: +886-2-2267 2588

☒ 佛山鉅利電子有限公司

E-mail: vecof@vansononic.net Office: fs_sales@veco.com.cn

Vanson Electronics(Nanhai)Co., Ltd. Tel: +86-757-8853 6828

Fax: +86-757-8853 6826

☐ 鴻立電子上海有限公司

E-mail: vesf@shtel.net.cn Office: vesi@shtel.net.cn

Vanson Electronics Shanghai Inc.

Tel: +86-21-5958 5999

Fax: +86-21-5958 5678

☐ 合肥宏立電子有限公司

E-mail: reception@veco-hf.com

HeFei Vanson Electronics Inc.

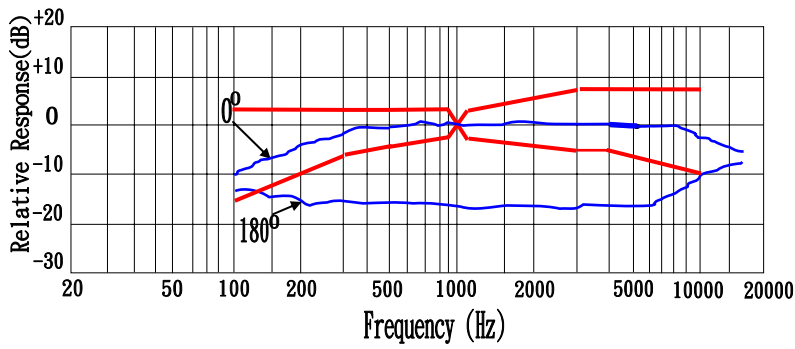
Tel: +86-551-568 9589

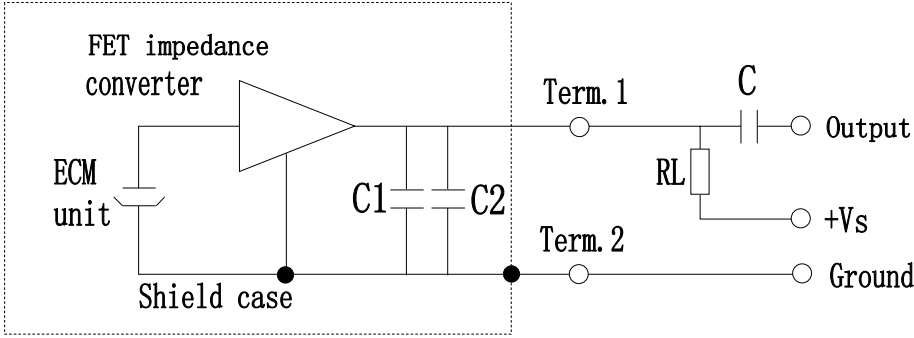
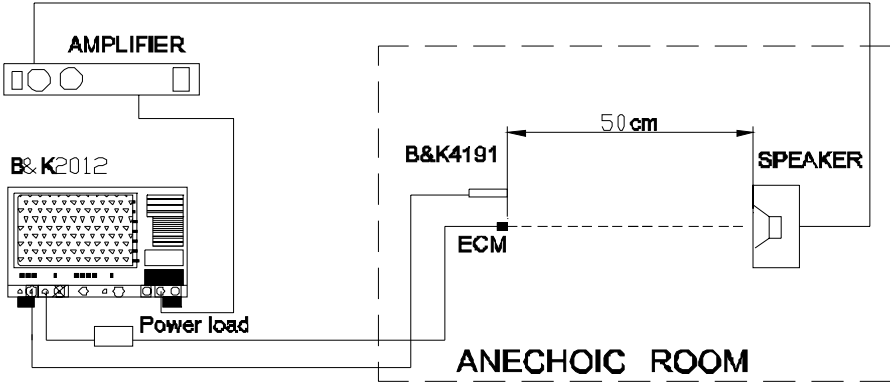
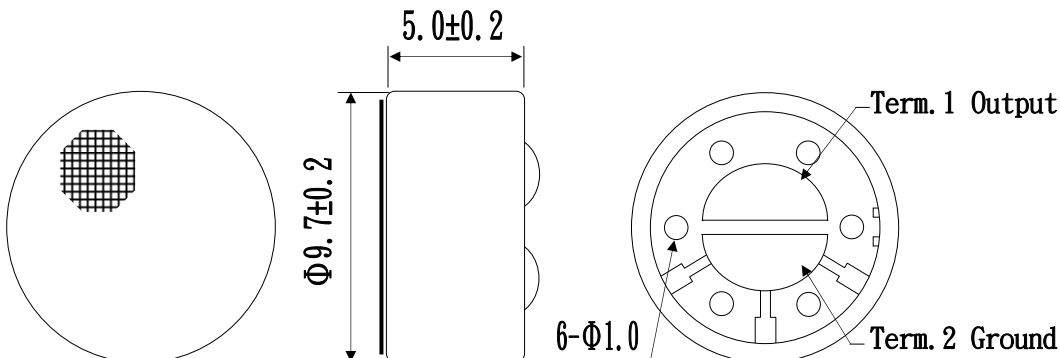
Fax: +86-551-568 9593

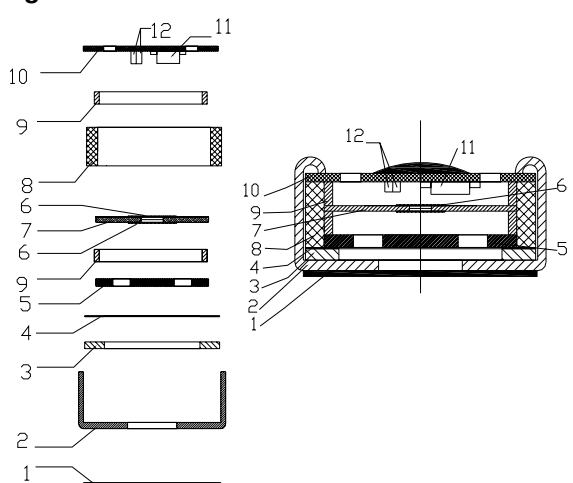
Design : VIVIAN

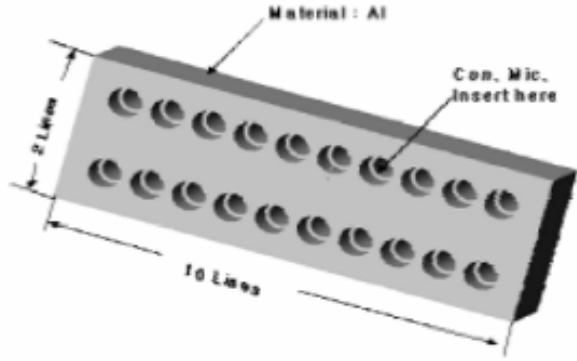
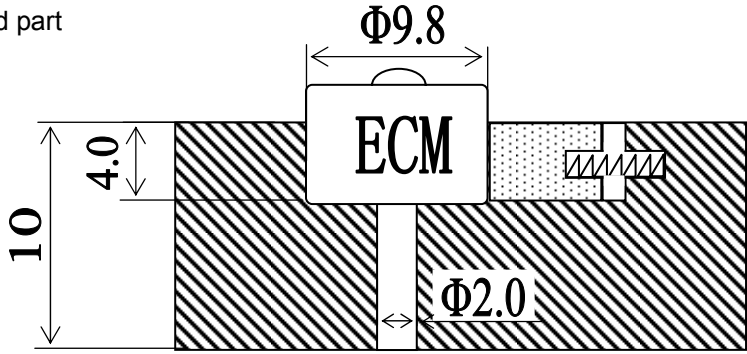
Checked : VIVIAN

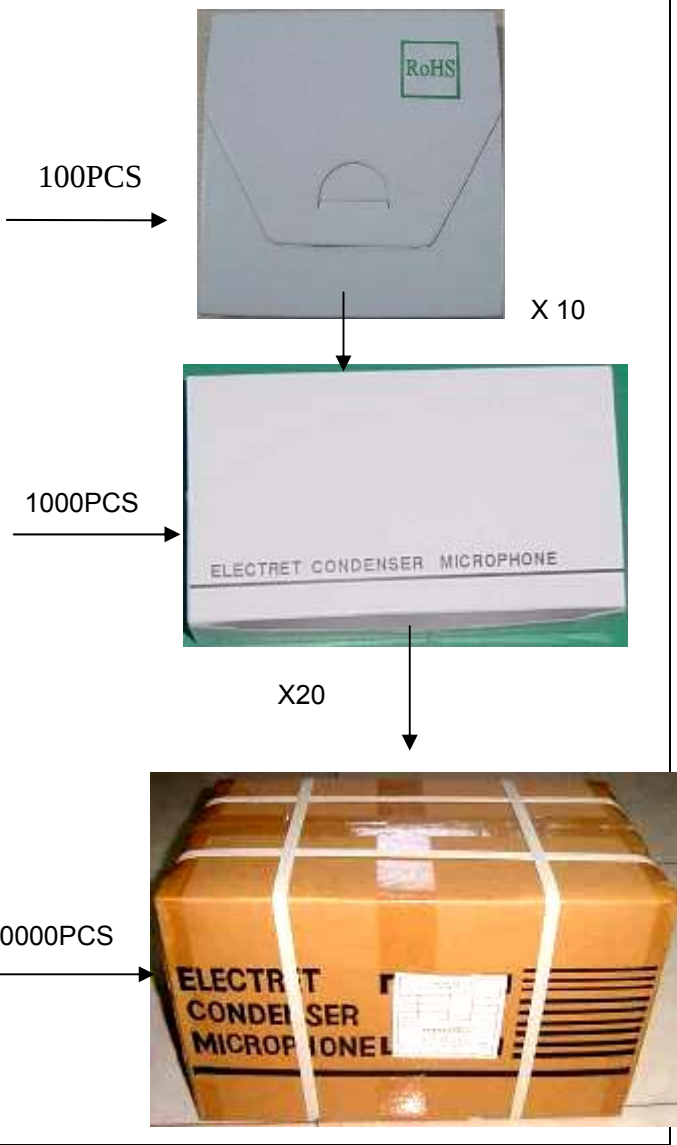
Approval : VIVIAN

1.	Name :	Unidirectional Back Electret Condenser Microphone																														
2.	Model No.	PVM-9750UB-AC373S		C1=10PF		C2=33PF																										
3.	Scope :	This specification applies back electret condenser microphone (Temp=20±2℃ Room Humidity=65±5%)																														
	No	Parameter	Symbol	Condition	Limits			Unit																								
					Min.	Center	Max.																									
3.1	Sensitivity	S		0dB=1V/Pa , at 1kHz	-40	-37	-34	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)	60			dB																								
3.5	Decreasing Voltage	Δ S		V _{CC} =3.0V to 2.0V			-3	dB																								
3.6	Operating Voltage				1.0		10	V																								
3.7	Maximum input S.P.L						110	dB																								
3.8	Directional Sensitivity			1 kHz @ 180 degree	10			dB																								
3.9	Typical Frequency Response Curve																															
Frequency Response																																
																																
Microphone Response Tolerance Window																																
<table><tr><td>Frequency(Hz)</td><td>Lower Limit(dB)</td><td>Upper Limit(dB)</td></tr><tr><td>100</td><td>-15</td><td>+3</td></tr><tr><td>800</td><td>-4</td><td>+3</td></tr><tr><td>1000</td><td>0</td><td>0</td></tr><tr><td>1200</td><td>-4</td><td>+4</td></tr><tr><td>3000</td><td>-5</td><td>+8</td></tr><tr><td>5000</td><td>-6</td><td>+8</td></tr><tr><td>10000</td><td>-10</td><td>+8</td></tr></table>									Frequency(Hz)	Lower Limit(dB)	Upper Limit(dB)	100	-15	+3	800	-4	+3	1000	0	0	1200	-4	+4	3000	-5	+8	5000	-6	+8	10000	-10	+8
Frequency(Hz)	Lower Limit(dB)	Upper Limit(dB)																														
100	-15	+3																														
800	-4	+3																														
1000	0	0																														
1200	-4	+4																														
3000	-5	+8																														
5000	-6	+8																														
10000	-10	+8																														

3.9	Circuit Diagram	
		Explain $R_L=2.2K\Omega$ $V_s=3.0V$ $C_1=10PF$ $C_2=33PF$ $C=1\mu F$
4.	Test Setup Drawing	
		
5.	Appearance And Dimension	Unit : mm
		

6.	Drawing 	12	Chip Capacitors		1	10PF+33PF			
		11	FET		1				
		10	P.C.B	FR-4	1				
		9	Copper ring		2				
		8	Chamber		1				
		7	link dump iron		2				
		6	Damping net		1				
		5	Electret Plate		1				
		4	Spacer		1				
		3	Diaphragm		1				
		2	Case	Al-Mg alloy	1				
		1	Dustproof gauze	Non-weave cloth	1				
		No.	Name	material	QTY	Remark			
		7.	Temperature Conditions <table><tr><td>Storage Temperature Range</td><td>Operation Temperature Range</td></tr><tr><td>-40℃ ~ +85℃</td><td>-40℃ ~ +85℃</td></tr></table>					Storage Temperature Range	Operation Temperature Range
Storage Temperature Range	Operation Temperature Range								
-40℃ ~ +85℃	-40℃ ~ +85℃								
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 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,+60℃ for 240 hours. 5. Thermal shocking test -40℃, 30 minutes ↔ +80℃, 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. Shape of heat sink  Material : Al Con. Mic. Insert here 10 Lines 2 Lines
	Shape of hole at fixed part  Φ9.8 ECM 4.0 10 Φ2.0

11.	Packing Introduction	Packing chart
	DIMENSION:(LENGTH*WIDTH *HEIGHT) a. SMAIL PACKET 100mm*100mm*10mm b. MID PACKET: 205mm*150mm*50mm c. PAPER CASE: 550mm*230mm*235mm EQUIPMENT a) ADHENSIVE TAPE MACHINE b) AUTO PACKER PACKING INTRODUCTION c) 100PCS/ SMAIL PACKET d) 1000PCS/MID PACKET e) 20000PCS/PAPER CASE QUANTITY INTRODUCTION f) 1PC=0.70g g) NET WEIGHT : 14.0kg GROSS WEIGHT : 17.0kg LABEL STIPULATION a. LABELEDEVERY BOXES (SEE THE CHART) b. DIMENSIONS SHOULD BE SEEN EASILY.	 100PCS → X 10 1000PCS → X20 20000PCS →