



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-6015B-1PC423G018		
客戶承認簽章 Customer Approval Signature	In Charge	Checked	Approval

Revision History			
Version	Date	Description	Author
V 001	2011.02.24	Creation	LJM

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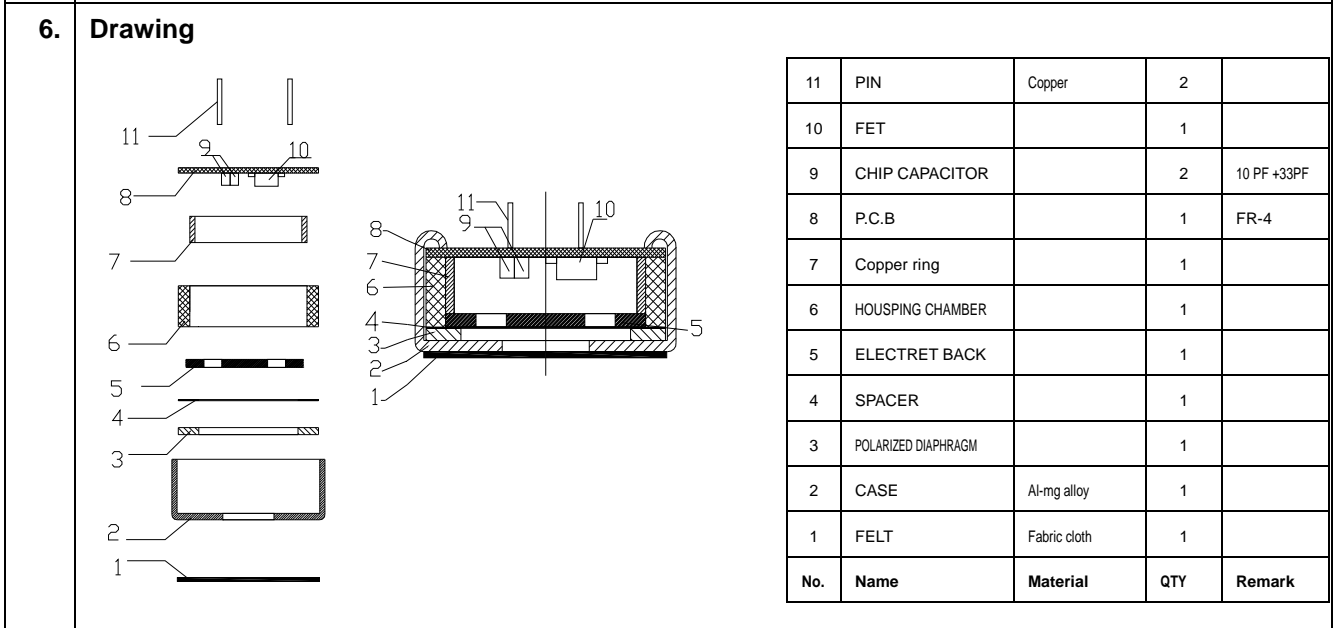
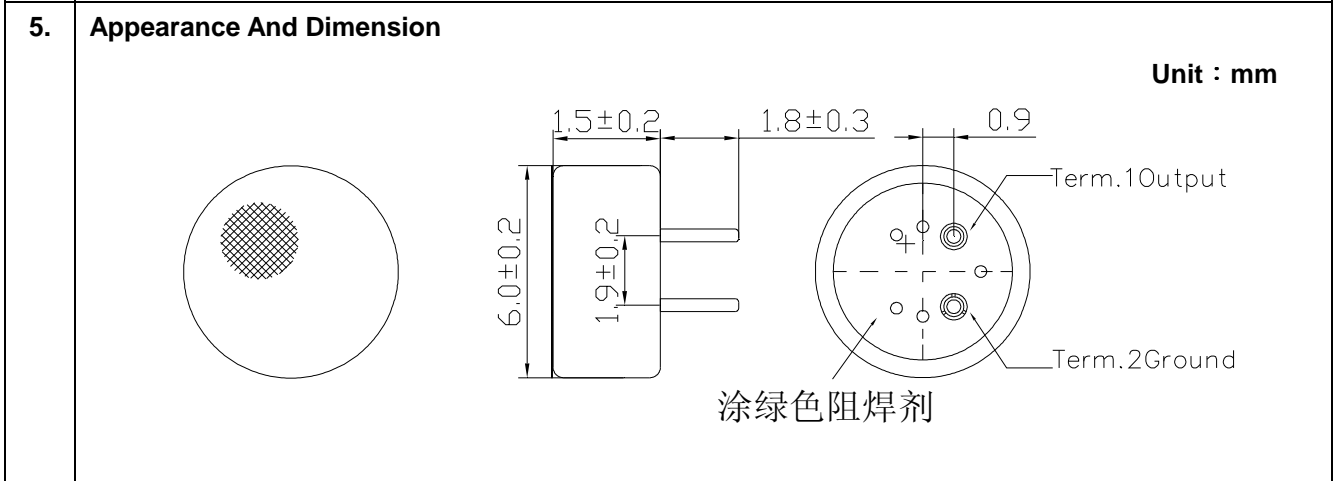
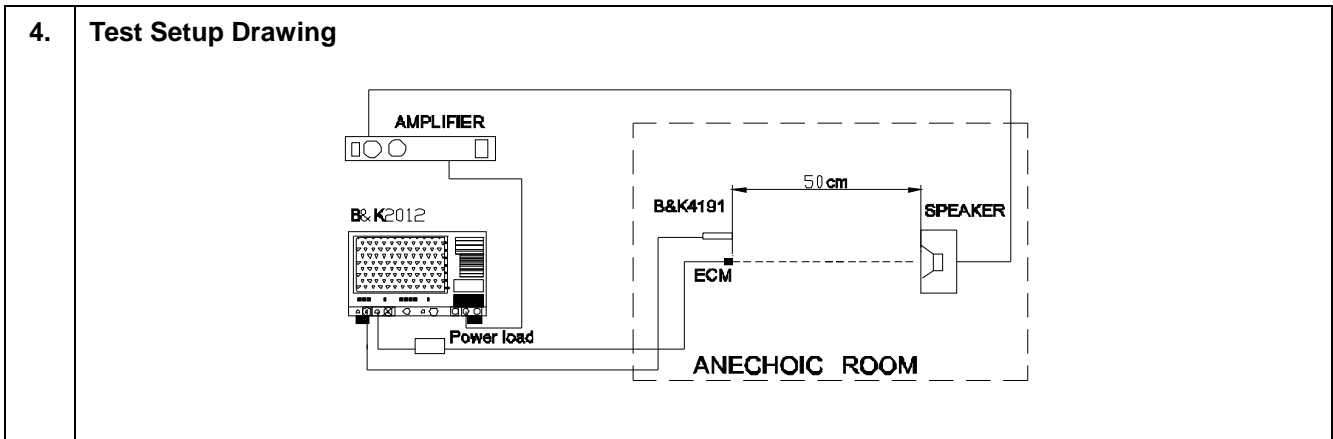
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1.	Name :	Omnidirectional Back Electret Condenser Microphone																																		
2.	Model No.	PVM-6015B-1PC423G018	C1=10PF	C2=33PF	PIN=1.8mm																															
3.	Scope :	This specification applies back electret condenser 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	KΩ																												
	3.3	Current Consumption	I _{DSS}	V _{CC} =2.0V,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	Δ S-VS	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																												
	3.9	Typical Frequency Response Curve																																		
		Frequency Response				Microphone Response Tolerance Window																														
						<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Frequency(Hz)</th> <th style="text-align: center;">Lower Limit(dB)</th> <th style="text-align: center;">Upper Limit(dB)</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">50</td><td style="text-align: center;">-6</td><td style="text-align: center;">+3</td></tr> <tr><td style="text-align: center;">100</td><td style="text-align: center;">-3</td><td style="text-align: center;">+3</td></tr> <tr><td style="text-align: center;">800</td><td style="text-align: center;">-3</td><td style="text-align: center;">+3</td></tr> <tr><td style="text-align: center;">1000</td><td style="text-align: center;">0</td><td style="text-align: center;">0</td></tr> <tr><td style="text-align: center;">1200</td><td style="text-align: center;">-3</td><td style="text-align: center;">+3</td></tr> <tr><td style="text-align: center;">3000</td><td style="text-align: center;">-3</td><td style="text-align: center;">+8</td></tr> <tr><td style="text-align: center;">5000</td><td style="text-align: center;">-3</td><td style="text-align: center;">+8</td></tr> <tr><td style="text-align: center;">10000</td><td style="text-align: center;">-8</td><td style="text-align: center;">+8</td></tr> </tbody> </table>				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
Frequency(Hz)	Lower Limit(dB)	Upper Limit(dB)																																		
50	-6	+3																																		
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1200	-3	+3																																		
3000	-3	+8																																		
5000	-3	+8																																		
10000	-8	+8																																		
3.9	Measurement Circuit																																			
							Explain																													
							R _L =2.2KΩ																													
							V _s =2.0V																													
							C1=10PF																													
							C2=33PF																													
							C=1μF																													



7. Temperature Conditions

Storage Temperature Range	Operation Temperature Range
-40°C ~ +75°C	-20°C ~ +60°C

8. Terminal Mechanical Strength

Terminal mechanical strength to be no interference in operation after pulled the terminal with 1 Kg 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

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

9-2 High Temperature Test

$+70^\circ\text{C}$ for 72 hours.

9-3 Low Temperature Test

-20°C for 72 hours.

9-4 Humidity Test

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

9-5 Temperature Cycles

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

9-6 Packing Drop Test

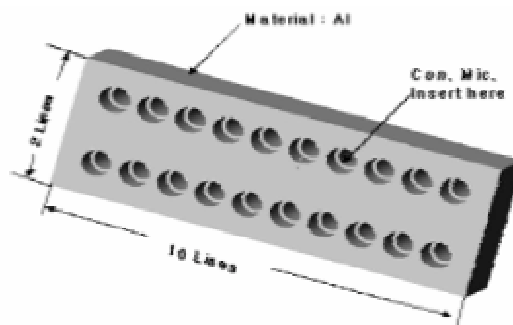
Height : 1m

Procedure: 5 times from each of 3 axis's

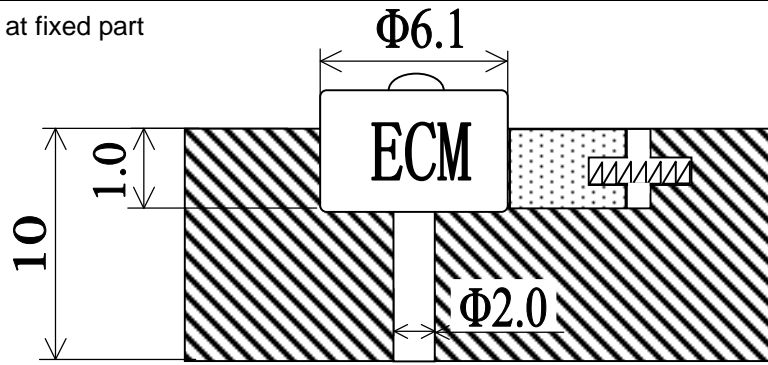
10. Soldering Condition

- 10.1 we use anti-static welding machine which can control soldering temperature automatically.
- 10.2 Soldering temperature should be controlled under 320°C .
- 10.3 MIC shall be fixed on the metal block (heat sink), which has high radiation effects , and heat sink shall contact with MIC tightly.
- 10.4 Soldering time for each terminal shall be 1~2 sec.
- 10.5 Soldering pinhole shall be avoided.
- 10.6 MIC 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).
- 10.7 Heat Sink

Shape of heat sink



Shape of hole at fixed part



11. Packing Introduction

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

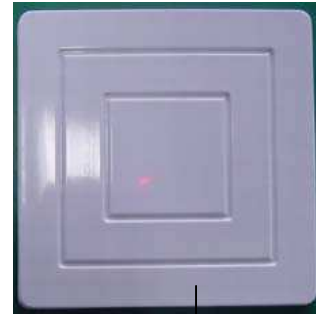
QUANTITY INTRODUCTION

- i) 1PC=0.2g
- j) NET WEIGHT : 5.6kg
GROSS WEIGHT : 8.6kg

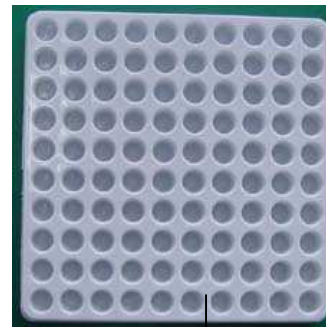
LABEL STIPULATION

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

Packing chart



X1



100PCS

X14



1400PCS

X20



28000PCS