Specification For Approval

承 認 書

客　　戶 （Customer）			
品　　名 （Product Name）	ECM ASS'Y		
機　　種 （Model No.）			
客戶料號 （Customer Parts No.）			
供應商料號（Supplier Model No.）	PVMW6027B-8C464G-7FA		
客戶承認簽章 Customer Approval Signature	In Charge	Checked	Approval

Revision History

Version	Date	Description	Author
V 001	2012.02.15	Creation	VIVIAN
V002	2012.02.17	The connector pole 1 (black color) to connected Mic Term 1 output (+) and connector pole 2 (red color) to connected Mic Term 2 Ground (-). The wire length 55+/-5mm is from the center of Mic to the first edge of connector housing.	VIVIAN

❑紘立企業有限公司 *E-mail:* vecot@veco.com.tw

Vansonic Enterprise Co., Ltd. Tel: +886-2-2267 2389 Fax: +886-2-2267 2588

✓佛山鋐利電子有限公司 *E-mail*: vecof@vansonic.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***

VANSONIC ENTERPRISE CO.,LTD.

3F., No. 123, Zhongcheng Rd., Tucheng Dist., New Taipei City, Taiwan.

E-mail: vecot@veco.com.tw ***http://www.veco.com.tw***

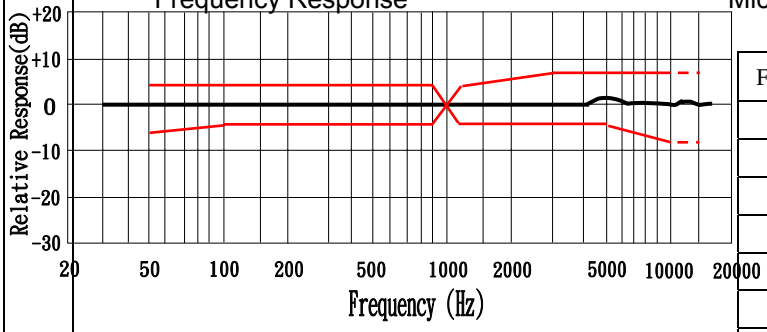
TEL: +886-2-2267 2389 ***FAX: +886-2-2267 2588***

1.	**Name：**	Omni directional Back Electret Condenser Microphone			
2.	**Model No.**	**PVMW6027B-8C464G-7FA**	**C1=10PF**	**C2=33PF**	**IP=67**
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	-50	-46	-42	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	△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

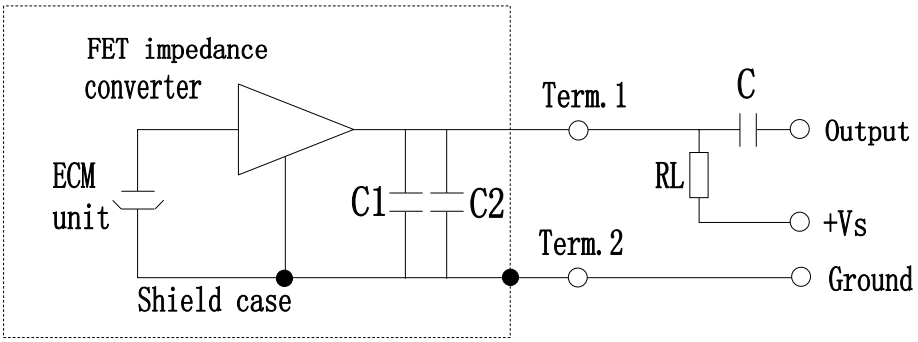
Frequency Response



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

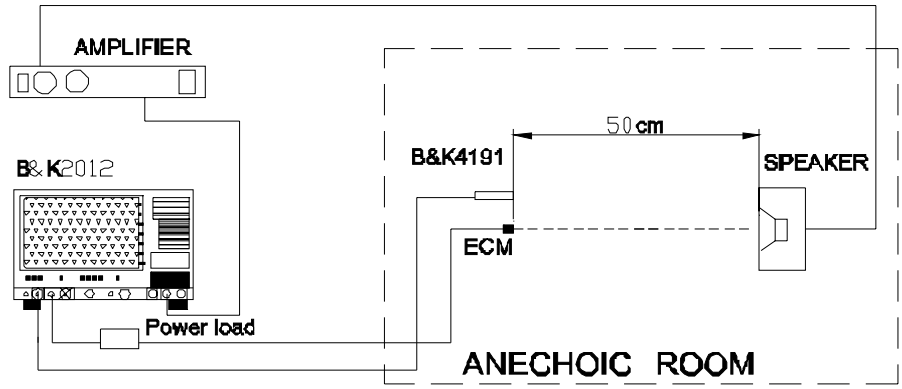
Vs =2.0V

C1=10PF

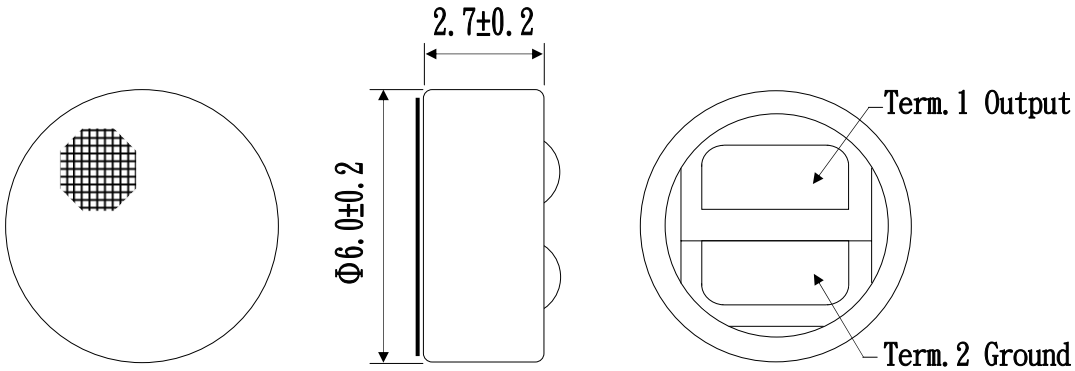
C2=33PF

C=1μF

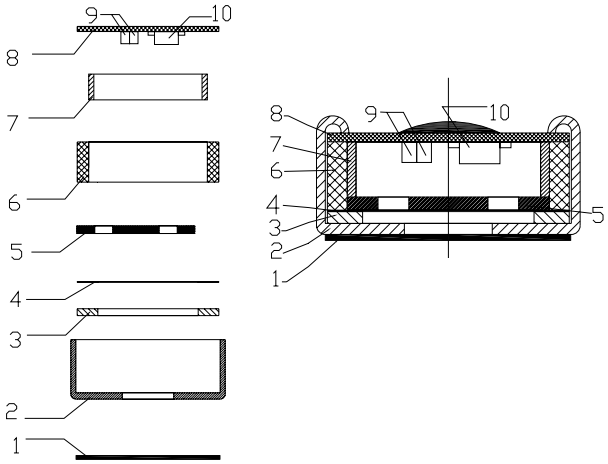
4. Test Setup Drawing



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



6. Drawing



No.	Name	material	QTY	Remark
10	FET		1	
9	Chip Capacitor			10PF+33PF
8	P.C.B		1	FR-4
7	Copper ring		1	
6	HOUSPING CHAMBER		1	
5	ELECTRET BACK		1	
4	SPACER		1	
3	POLARIZED DIAPHRAGM		1	
2	CASE	Al-Mg alloy	1	
1	FELT	Fabric cloth	1	IP67

7. Temperature Conditions

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

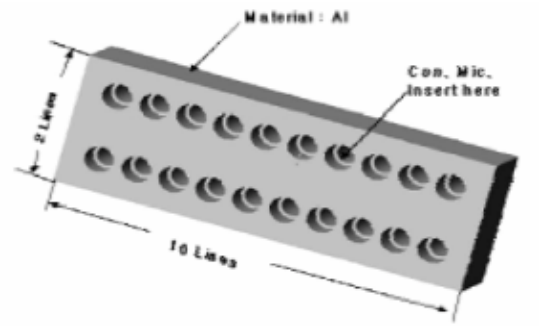
8. Terminal Mechanical Strength

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

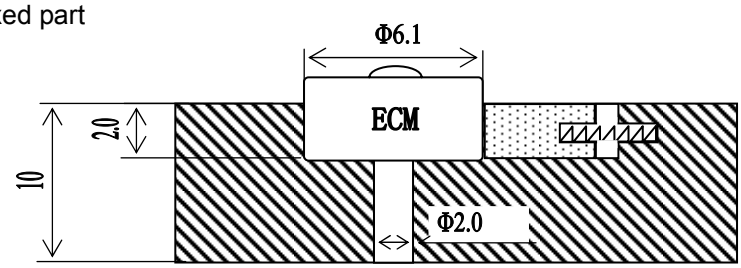
9.	**Reliability Test** After each of following test, the sensitivity of the microphone should be within ±3dB of initial sensitivity after 3hours of conditioning at 20℃. 1. Vibration Test Frequency : 10Hz~55Hz Amplitude : 1.52mm Change of Frequency : 1 octave/min 2 hours in each of axes 2. High Temperature 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°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).

10.

5. Shape of heat sink



Shape of hole at fixed part



11.

Packing Introduction	**Packing chart**

DIMENSION:(LENGTH*WIDTH *HEIGHT)

Anti-Static Bag

100mm*100mm*4mm

SMALL BOX

100mm*100mm*17mm

CARTON SIZE:

550mm*230mm*235mm

QUANTITY AND WEIGHT

100PCS/SMALL BOX

12000PCS/CARTON

1PC=0.53g

NET WEIGHT：6.36kg

GROSS WEIGHT：9.36kg

LABEL STIPULATION

CONTENTS SHOULD BE SEEN CLEAR.

X1

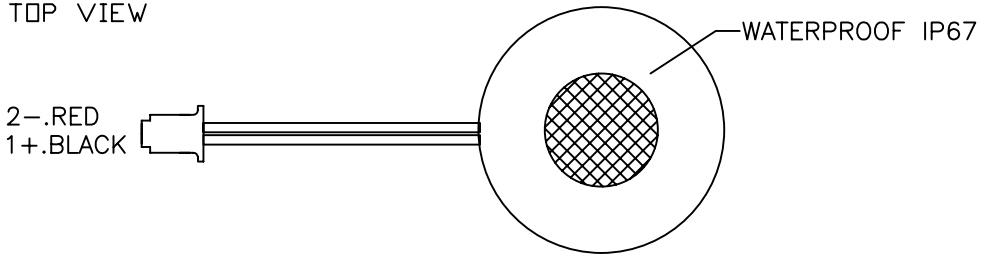
100PCS

X120

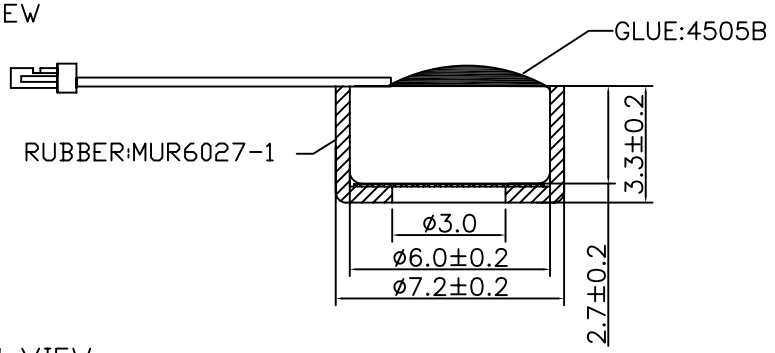
12000PCS

不准使用鉍利
電子禁止使用的
環境管理物質

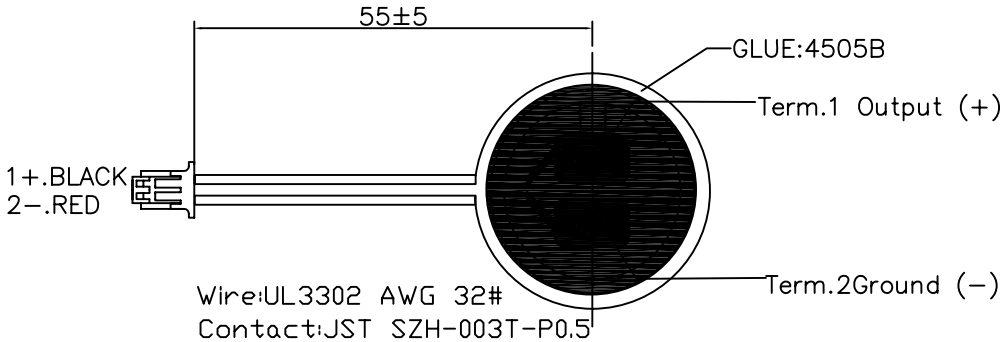
TOP VIEW



SIDE VIEW



BOTTOM VIEW



Wire:UL3302 AWG 32#
Contact:JST SZH-003T-P0.5
Housing:JST ZHR-2
(OR COMPATIBLE)

TOL / RANGE			V	
0−8	±0.05	±0.10	±0.20	±0.30
8−16	±0.10	±0.15	±0.25	±0.40
16−24	±0.15	±0.20	±0.30	±0.50
24−50	±0.20	±0.25	±0.40	±1.0
50−100	±0.25	±0.30	±0.50	±2
>100	±0.40	±0.40	±0.80	±3

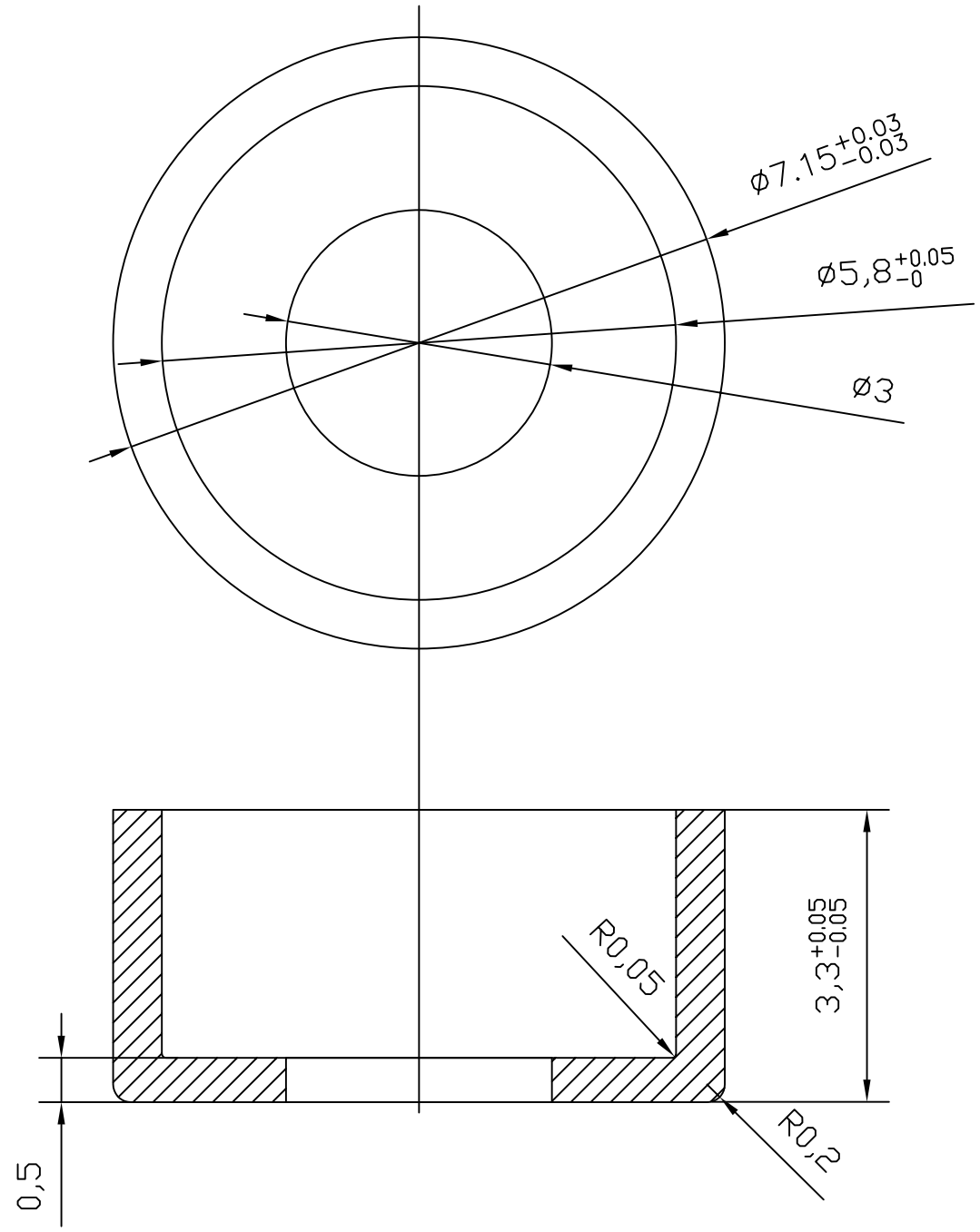
▲ : critical to function dimension

VERSION	DATE	DESCRIPTION
V 002	12.02.17	The connector pole 1 (black color) to connected Mic Term 1 output (+) and connector pole 2 (red color) to connected Mic Term 2 Ground (−).
V 001	12.02.15	

Vanson Electronics (Nanhai) Co., Ltd.
鉍利電子
E-MAIL: vecof@vansonic.net
TEL:+86-757-88536828 FAX:+86-757-88536826

Part Number :
PVMW6027B-8C464G-7FA

Unit: mm	Scale:	Appr.: VIVIAN	
Tol.:		CHK.: VIVIAN	Dwg.:廖繼茂



技術要求:

1. 要求6.0MIC放入膠套不脫落,且鬆緊度適宜。
2. 內外表面光滑無毛刺斷裂及料邊。
3. 未注明公差按IT14級。

Title: MUR6027-1			
G:\DWG\SP-ASS\13\13RF12.DWG	V001	06.12.13	JT−031−6027
	VERSION	DATE	DESCRIPTION
Vansonic Enterprise CO.,Ltd.	Unit: mm	Scale:	Appr.: CLIFF
紘立企業 E-MAIL:VANSONIC@MS4.HINET.NET TEL:+886-2-89666335 FAX:+886-2-89665220	Tol.:		CHK.: CLIFF Dwg.: VIVIAN