

MODEL NO : OBO-62KA-0B-01K

Features: Conformity Rosh Directive (2002/95/EC) Requests.

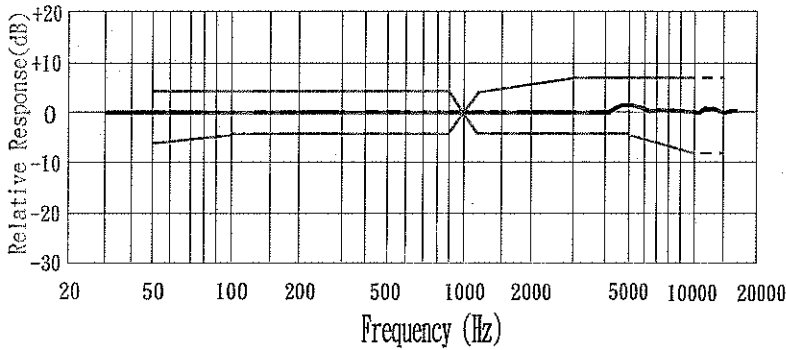
1. Electrical characteristics

Test Condition : (Vs=2.0V, RL=2.2KΩ, Ta=20±2°C, R.H.=65±5%)

Directivity : Omnidirectional							
No	Parameter	Symbol	Condition	Limit			Unit
				Min	Center	Max	
1.1	Sensitivity	S	F=1KHz, S.P.L.=1Pa 0dB=1V/Pa	-41	-38	-35	dB
1.2	Output Impedance	Zout	F=1KHz			2.2	KΩ
1.3	Current Consumption	IDss	VS=2.0V, L=2.2KΩ			0.5	mA
1.4	Signal to Noise Ratio	S/N	S:(F=1KHz, S.P.L=1Pa) N:(A-Weighted Curve)	58			dB
1.5	Sensitivity reduction	ΔS-VS	VS=3.0V to 2.0V			-3	dB
1.6	Operating Voltage			1.0		10	V
1.7	Maximum input S.P.L					110	dB

2. Typical Frequency Response Curve

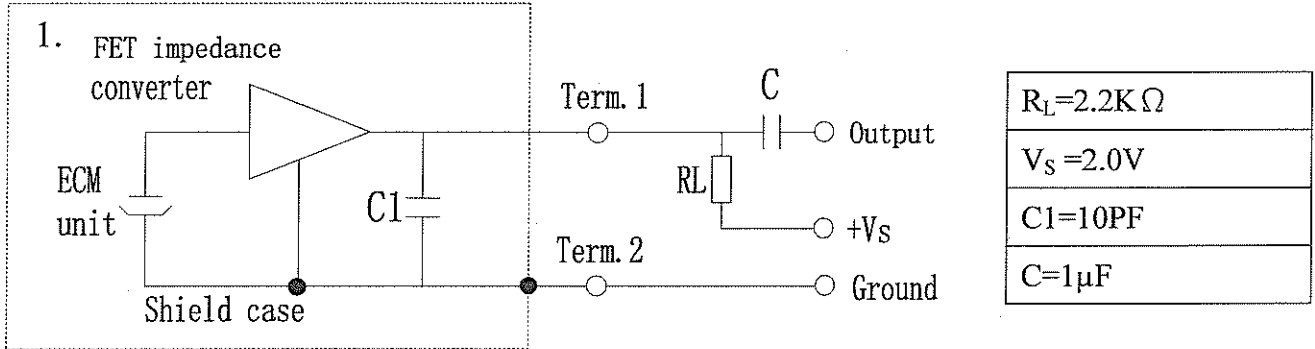
Frequency Response



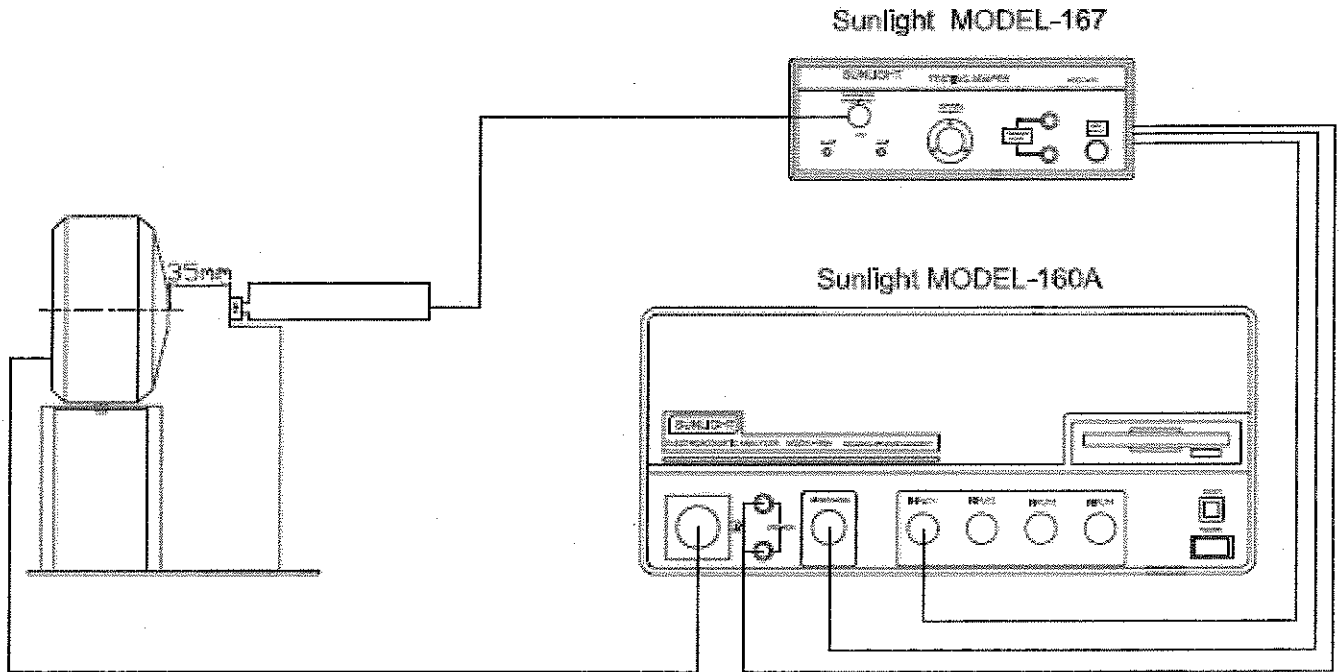
Microphone Response Tolerance Window

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. Circuit Diagram



4. Measurement Setup Drawing

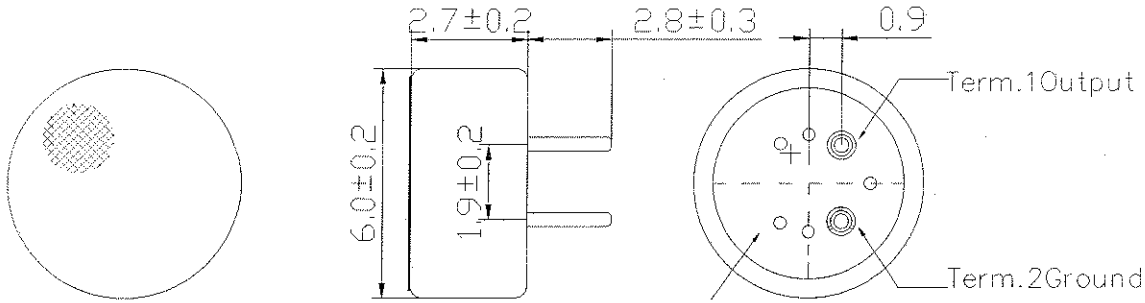


5. Appearance And Dimension

5.1 Soldering Standard : 320±5°C/ Max. 2 seconds

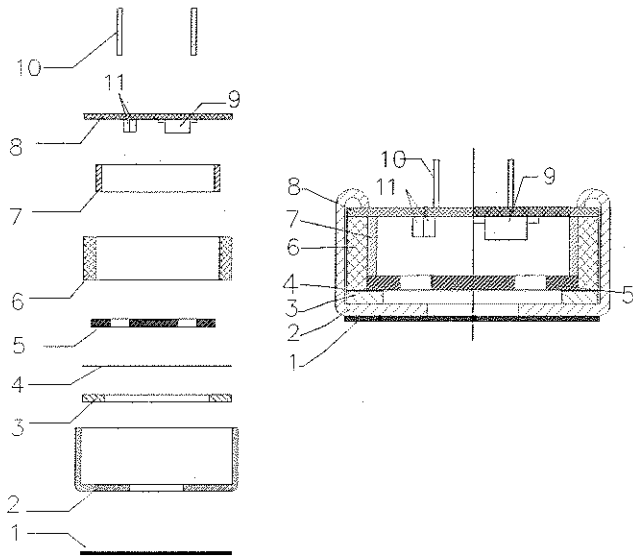
5.2 Mechanical Layout and Dimensions

Unit : mm



add green soldering paste

6. Material And Structure



11	CAP		2	10pF
10	PIN			
9	FET			
8	P.C.B			
7	Copper ring			
6	Housing Chamber			
5	Electret Back			
4	Spacer			
3	Polarized Diaphragm			
2	Case	Al-Mg Alloy	1	
1	Felt			
No.	Name	Material	QTY	Remark

7. Temperature Conditions7.1 Operating Temperature Range: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ 7.2 Storage Temperature Range: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ **8. Terminal Mechanical Strength**

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

9. Reliability TestAfter each of following test, the sensitivity of the microphone should be within $\pm 3\text{dB}$ of initial sensitivity after 3hours of conditioning at 20°C .**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 $+85^{\circ}\text{C}$ for 240 hours.**3. Low Temperature Test** -40°C for 240 hours.**4. Humidity Test**90%~95%RH, $+60^{\circ}\text{C}$ for 240 hours.**5. Thermal shocking test** -40°C , 30 minutes \leftrightarrow $+80^{\circ}\text{C}$, 30 minutes, repeated 32 cycles \rightarrow room temperature, 3 hours.**6. Temperature Cycles** $-40^{\circ}\text{C} \longleftrightarrow +20^{\circ}\text{C} \longleftrightarrow +85^{\circ}\text{C} \longleftrightarrow +20^{\circ}\text{C} \longleftrightarrow -40^{\circ}\text{C}$

(2h) (0.5h) (2h) (0.1h) (2h) (0.5h) (2h) (0.5h) (2h) for 5 cycles.

7. Packing Drop Test

Height : 1.5m

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 330 Ω .

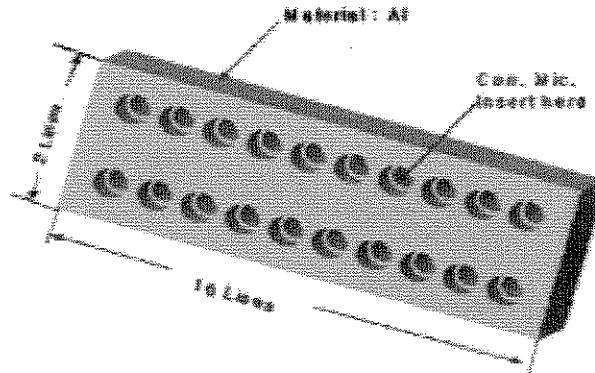
b) Air discharge

The microphone shall operate normally after 10 discharges to is 8KV DC and the discharge network is 150pF and 330Ω

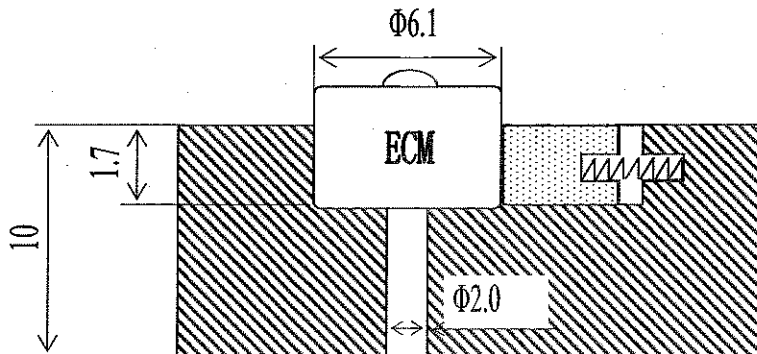
10. Soldering Condition

1. We suggest using anti-static welding machine which can control soldering temperature automatically.
2. Soldering temperature should be controlled under 320°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).
5. Heat Sink

Shape of heat sink



Shape of hole at fixed part



11.Code Explanation

NAME	EXPLANATION
O	Omni-directional Mic
B	Back Electret
60	D= 6.0mm
27	T=2.7mm
2	PCB version No.2
-	Dash
383	Sensitivity -38 ± 3 dB
G	Test Condition $2.2K\ \Omega / 2.0V$
-	Dash
PAH	Pin= 2.8mm
C06	Capacitance :10PF
-	Dash
00	NO Rubber
-	Dash
0	No especial require

12. Packing Introduction

Packing chart

1. Model Number:

OBO-62KA-0B-01K

2. DIMENSION:(LENGTH*WIDTH *HEIGHT)

2.1 SMALLPACKET

100mm*100mm*5mm

2.2 MID PACKET:

205mm*105mm*50mm

2.3 PAPER CASE::

550mm*230mm*235mm

3. EQUIPMENT

3.1 ADHENSIVE TAPE MACHINE.

3.2 AUTO PACKER.

4. PACKING INTRODUCTION

4.1. 100PCS/ INHALE PLASTIC BOX

4.2 1400PCS/MID PACKET.

4.3 28000PCS/PAPER CASE

5. QUANTITY INTRODUCTION

5. 11PC=0.2g.

5.2 NET WEIGHT : 5.6kg

GROSS WEIGHT : 8.6kg

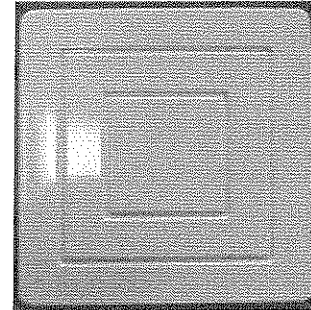
6. LABEL STIPULATION

6.1 LABELEDEVERY BOXES

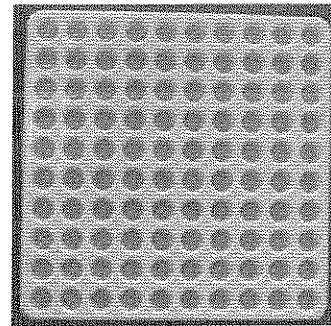
(SEE THE CHART)

6.2DIMENSIONS SHOULD BE SEEN
EASILY.

28000PCS



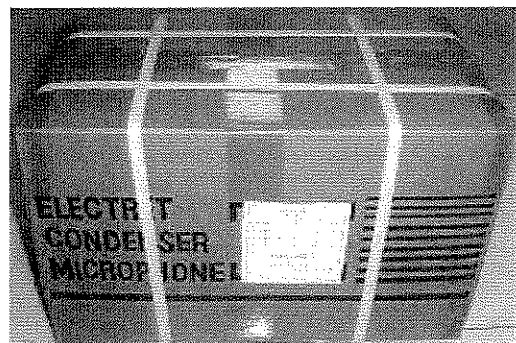
X1



X14



X20



→

