

OBO Pro.2

SPECIFICATIONS

MODEL NO
OBO-62KA-0B-012

PART NAME
ELECTRET CONDENSER MICROPHONE

SHEET
1 OF 6

ALTERNATION HISTORY

Marking	Date	ECN NO.	REV.	Description	Page	PREPARE BY	APPROVE BY
※1	NOV,19,09	DG0911018	D	Manner of packing	6	蒋政	Joyan

REV.	DATE	PREPARED BY	CHECKED BY	APPROVED BY
D	NOV,19,2009	蒋政 11/20	<i>[Signature]</i>	David

MODEL NO : OBO-62KA-0B-012

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

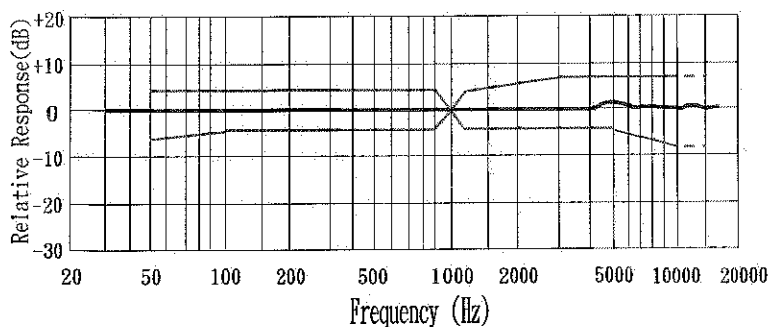
1.ELECTRICAL CHARACTERISTICS

(Temp=20±2°C Room.Humidity=65±5%)

Directivity : Omnidirectional Back Electret Condenser Microphone							
No	Parameter	Symbol	Condition	Limit			Unit
				Min	Center	Max	
1.1	Sensitivity	S	F=1KHz,S.P.L.=1Pa 0dB=1V/Pa	-45	-42	-39	dB
1.2	Output Impedance	Zout	F=1KHz			2.2	KΩ
1.3	Current Consumption	IDss	Vcc=2.0V, RL=2.2KΩ			500	μA
1.4	Signal to Noise Ratio	S/N	S:(F=1KHz,S.P.L=1Pa) N:(A-Weighted Curve)	58			dB
1.5	Decreasing Voltage	ΔS	Vcc=3.0V to 2.0V			-3	dB
1.6	Maximum input S.P.L					110	dB
1.7	Operating Voltage			1.0		10	V

1.8 Typical Frequency Response Curve

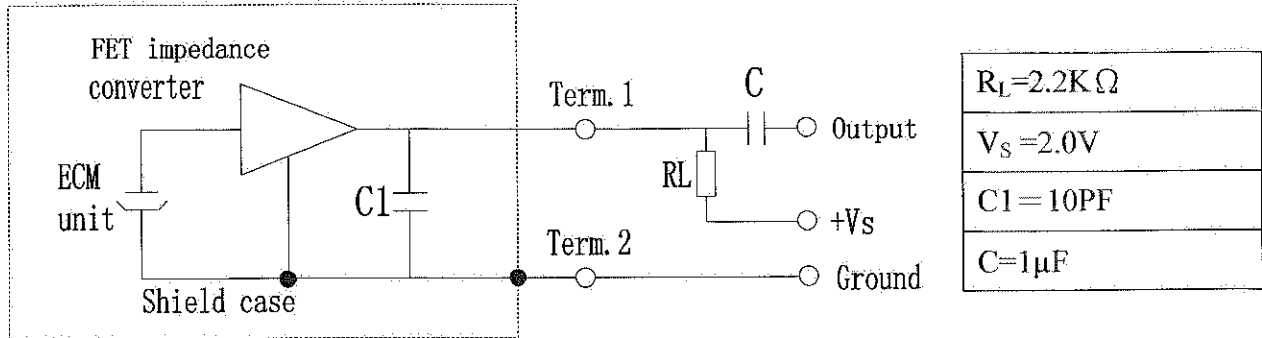
Frequency Response



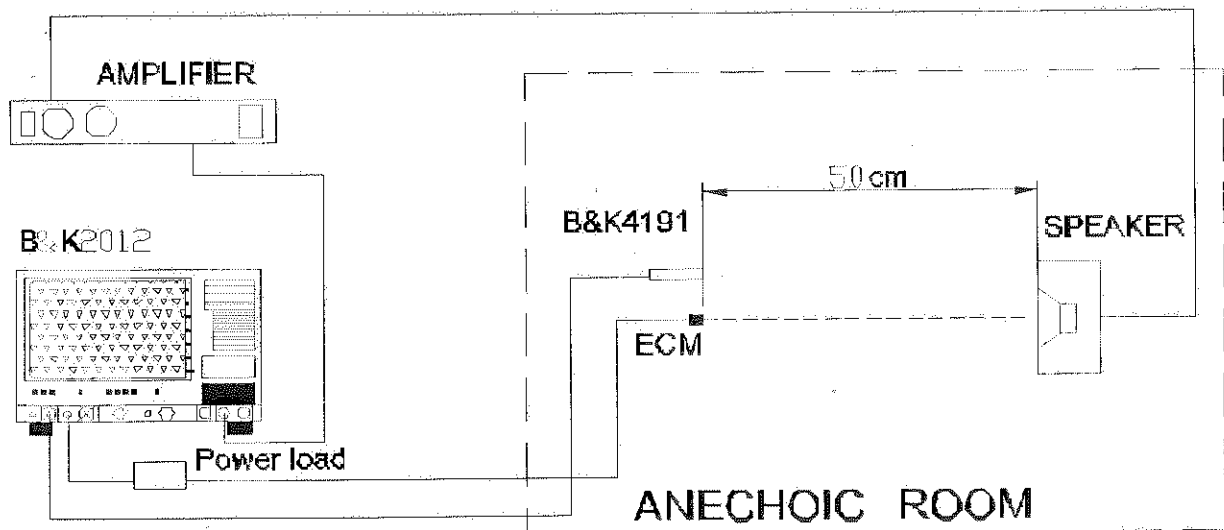
Microphone Response Tolerance Window

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

2. MEASUREMENT CIRCUIT

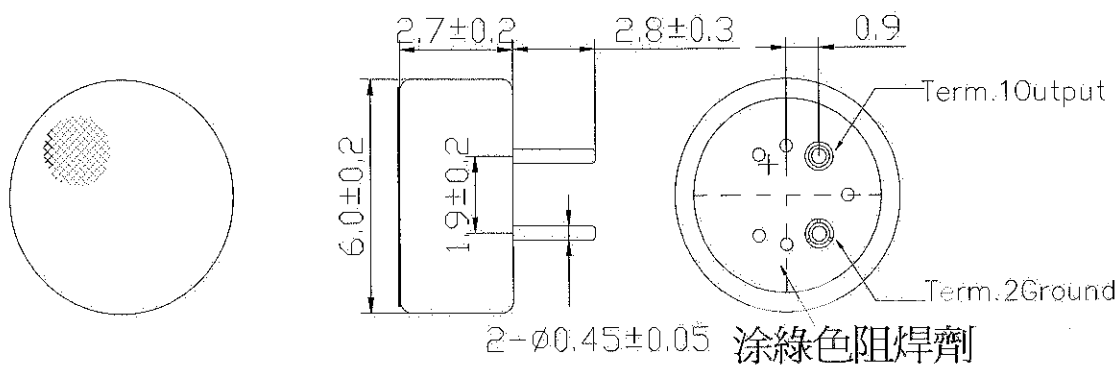


3. TEST SETUP DRAWING

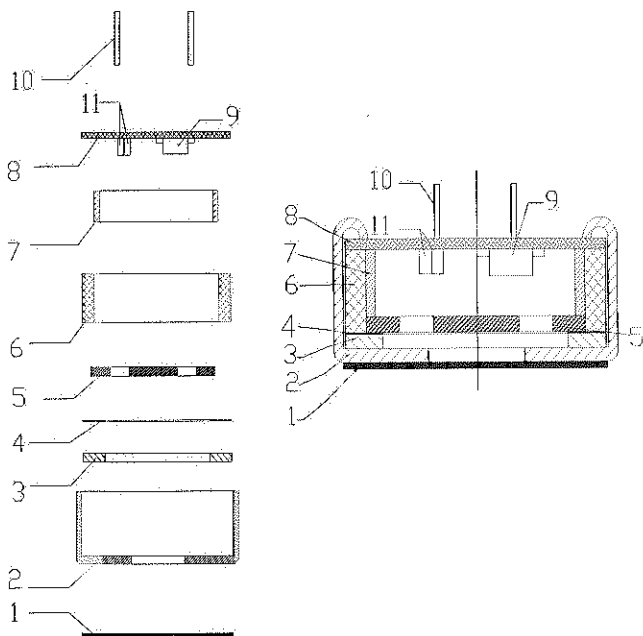


4. APPEARANCE AND DIMENSION

Unit:mm Tolerance:±0.2mm



5. DRAWING



11	Chip Capacitor		2	10pf
10	PIN		1	
9	FET		1	
8	PCB	FR4	1	
7	Copper Ring		1	
6	Chamber		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



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6. TEMPERATURE CONDITIONS

6.1 Operating Temperature Range: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$

6.2 Storage Temperature Range: $-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$

7. RELIABILITY TEST

Vibration Test	To be no interference in operation after vibrations, 10Hz to 55Hz for 1 minute full amplitude 1.52mm, for 2 hours at 3 axes .
Drop Test	The microphone unit without packaged must be subjected to each 5one time from 1 drops at 3 axes,the height of 1 meter to 20 mm thick wooden board.
Dry Heat/Cold	(a) After exposure at $+70^{\circ}\text{C}$ for 72 hours, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. (b) After exposure at -20°C for 72 hours, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. (After any following tests, the sensitivity of the microphone to be within $\pm 3\text{dB}$ of initial sensitivity after 3hours of conditioning at 20°C)
Damp Heat	After exposure at $+40^{\circ}\text{C}$ and 90% ~95%relative humidity for 240hours. (After any following tests, the sensitivity of the microphone to be within $\pm 3\text{dB}$ of initial sensitivity after 3hours of conditioning at 20°C)
Temperature Cycle Test	After exposure at -20°C for 2 hr, from -20°C to $+25^{\circ}\text{C}$ for 1 hr ,at $+25^{\circ}\text{C}$ for 2 hr, from $+25^{\circ}\text{C}$ to 70°C for 2 hr ,at 70°C for 2 hr, from 70°C to -20°C for 2 hr , after 10cycles . (After any following tests, the sensitivity of the microphone to be within $\pm 3\text{dB}$ of initial sensitivity after 3hours of conditioning at 20°C)

8. CONCEPT OF UNIT

The difference between concept of unit "Pascal" and the one of unit can be explained as follows. in calibrating the sensitivity of ECMS. the sensitivity is manifested differently according as the unitis "Pascal" or " μbar ". That is the sensitivity will be increased by 20dB in the usage of unit "Pascal". Example : $-64\text{dB}(0\text{dB}=1\text{V}/\mu\text{bar})=-44\text{dB}(0\text{dB}=1\text{V}/\text{Pa})$

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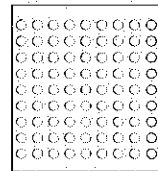
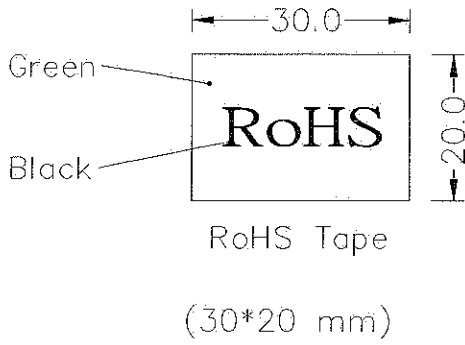
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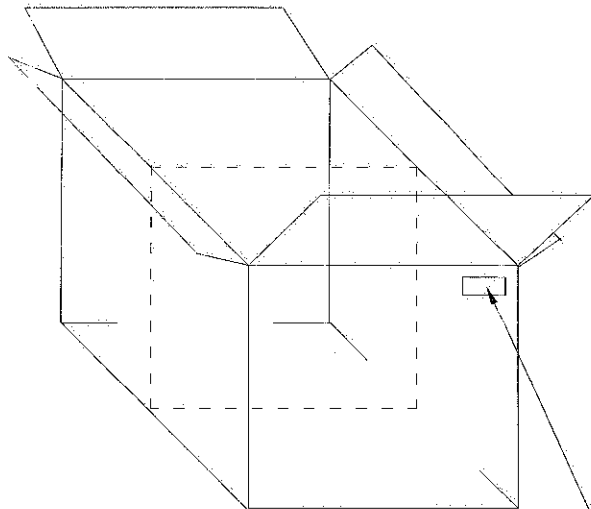
9. PACKAGING

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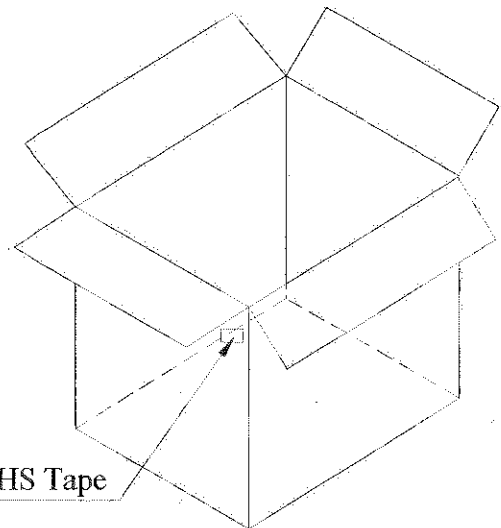
100*100*10mm

LOAD IN



550mm*230mm*235mm

CARTON 28000 pcs
(IMPORTED CARTON MATERIAL)



RoHS Tape

RoHS Tape

205mm*105mm*50mm

MIDDLE OUTSIDE BOX(1400 pcs)
(IMPORTED CARTON MATERIAL)