

OBO PRO.2 INC.

啓弘股份有限公司

No. 224-9, LANE 105, YUNG-FENG ROAD, PA-TE CITY, TAOYUAN, TAIWAN, R.O.C.

TEL: 886-3-361-4436 FAX: 886-3-361-4437

E-MAIL: obo@obopro2.com Website: www.obo.com.tw

Specification for Approval

NO.:

Part Name : Electret Condenser Microphone

Model No. : OBO-64EC-0B-002

Date : MAY.02,2002

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Please kindly make approval of our samples,
And return this form by fax or airmail, Thanks
for your kind attention and co-operation

(請對我們公司樣品給予承認, 承認後加蓋承認章以傳真或郵寄方式回覆, 謝謝貴公司的支持與合作)

Customer Name : _____

Customer Part No. : _____

Designed By	Checked By	Approval By

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S P E C I F I C A T I O N

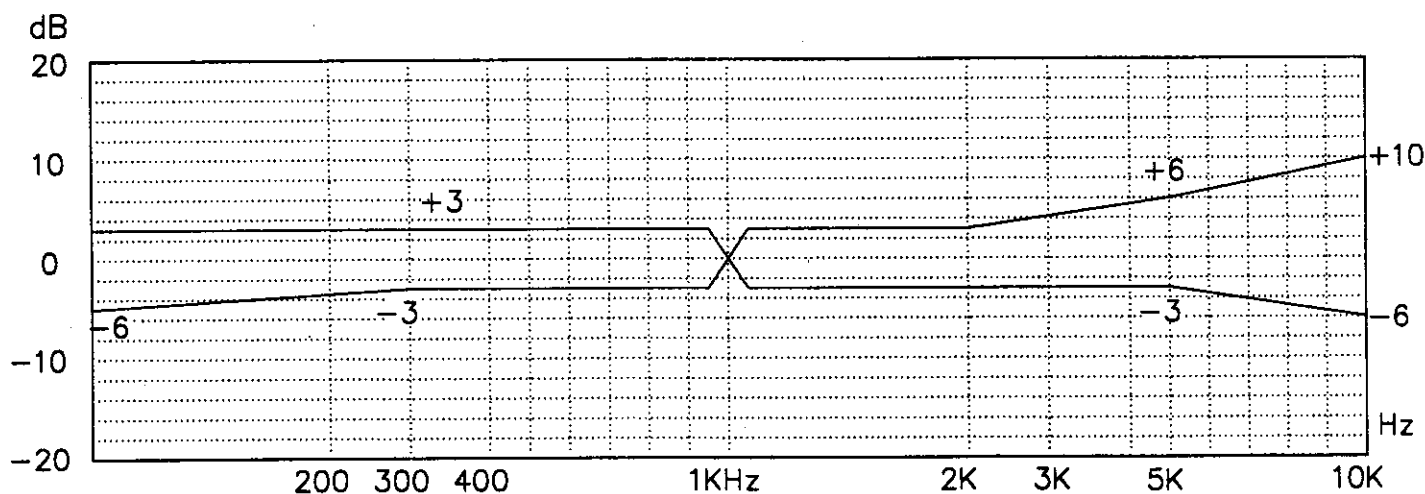
1. ELECTRICAL CHARACTERISTICS

Model No. : OBO-64EC-0B-002

TEMP=20±2° Room Humidity=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	-43	-40	-37	dB
1.2	Output Impedance	Zout	F=1KHz			2.2	KΩ
1.3	Current Consumption	Ioss	VS=2.0V, RL=2.2KΩ			500	μA
1.4	Signal to Noise Ratio	S/N	S: (F=1KHz, S.P.L=1Pa) N: (A-Weighed Curve)	60			dB
1.5	Decreasing Voltage	ΔS-VS	VS=3.0V to 1.5V			-3	dB

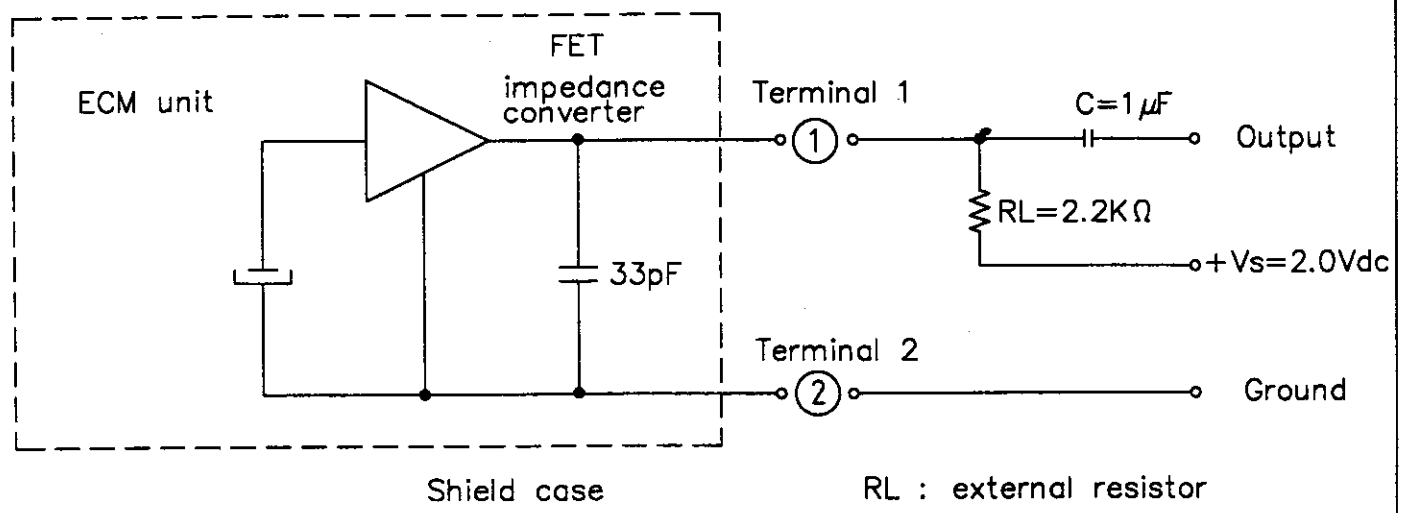
1.6 Typical Frequency Response Curve



- ◎ Frequency : 50~16,000Hz
- ◎ Operating Voltage : 1V to 10V
- ◎ Max. Input S.P.L. : 110dB

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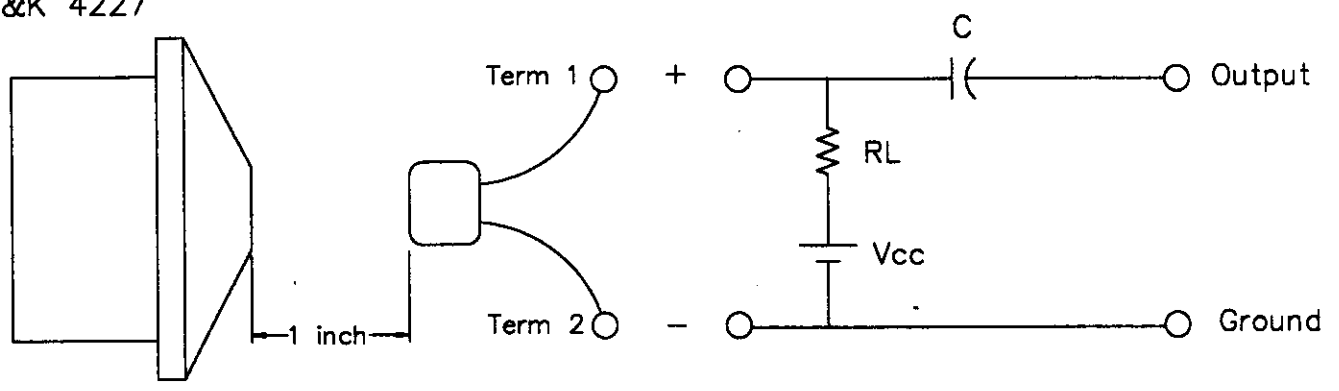
2. Measurement Circuit



3. Measurement Method

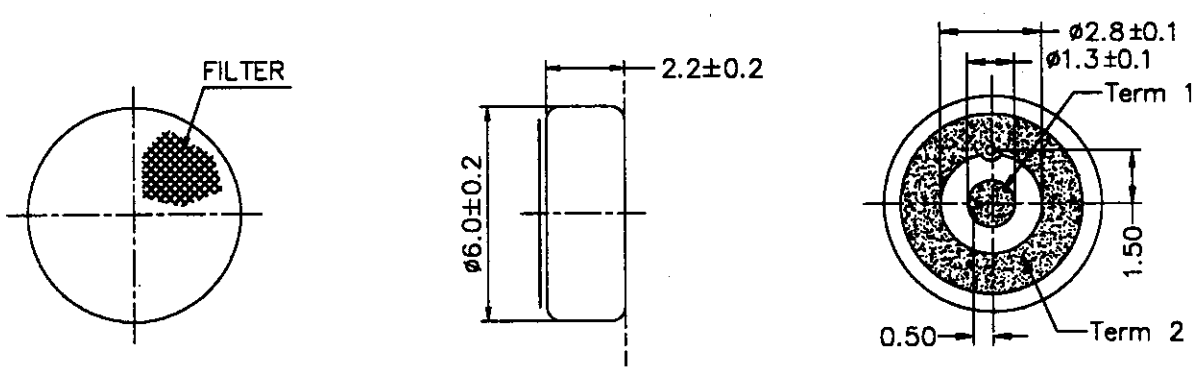
Artificial Mouth
B&K 4227

● NEAR FIELD TEST POSITION



Pressure at microphone position to be constant at 0dBPa

4. APPEARANCE & DIMENSION (Unit: mm)



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5. TEMPERATURE CONDITIONS

5.1 Operating Temperature Range : $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$


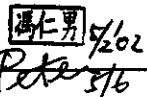
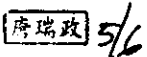
5.2 Storage Temperature Range : $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

6. 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	To be no interference in operation after dropped to concrete floor each one time from 1 meter height at three directions in state of packing.
Temperature Test	(a)After exposure at 85°C for 240 hours, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. (b)After exposure at -40°C for 240 hours, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. (The measurement to be done after 2 hours of conditioning at 20°C .)
Humidity Test	After exposure at 40°C and 90~95% relative humidity for 240 hours. sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. (The measurement to be done after 2 hours of conditioning at 20°C .)
Temperature Cycle Test	After exposure at -20°C for 1 hour, at 20°C for 10 minutes, at $+70^{\circ}\text{C}$ for 1 hour, at 20°C for 10 minutes, 5 cycles, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. (The measurement to be done after 2 hours of conditioning at 20°C .)

7. CONCEPT OF UNIT

The difference between concept of unit "Pascal" and the one of unit " μbar " can be explained as follows. in calibrating the sensitivity of ECMS. the sensitivity is manifested differently according as the unit is "Pascal" or " μbar ". That is the sensitivity will be increased by 20dB in the usage of unit "Pascal". Example : $-62\text{dB}(\text{OdB}=1\text{V}/\mu\text{bar})=-42\text{dB}(\text{OdB}=1\text{V}/\text{Pa})$

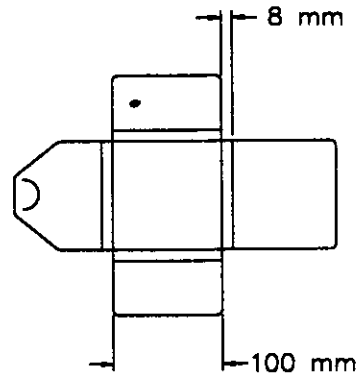
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8. PACKAGING

• MIC

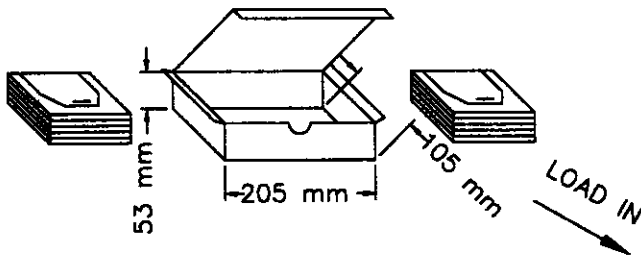


PUT INTO CARDBOX

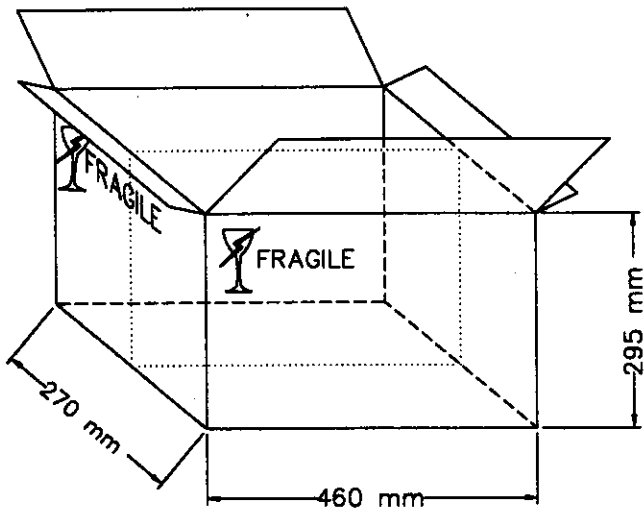
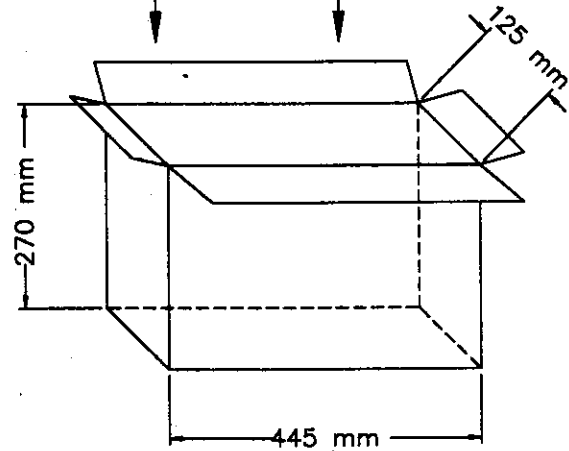


100 pcs / 1 Sponge Tray

10 CARDBOXES / PER SMALL BOX(1000 pcs)



LOAD IN



2 MIDDLE BOXES / PER CARTON (20000 pcs)
(IMPORTED CARTON MATERIAL)

LOAD IN

10 SMALL BOXES / PER MIDDLE BOX(10000 pcs)
(IMPORTED CARTON MATERIAL)

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