文件發行章

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-64SN-0B-002

Date : MAY.13,2002

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Version	A	A	A	A	A									

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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SPECIFICATION

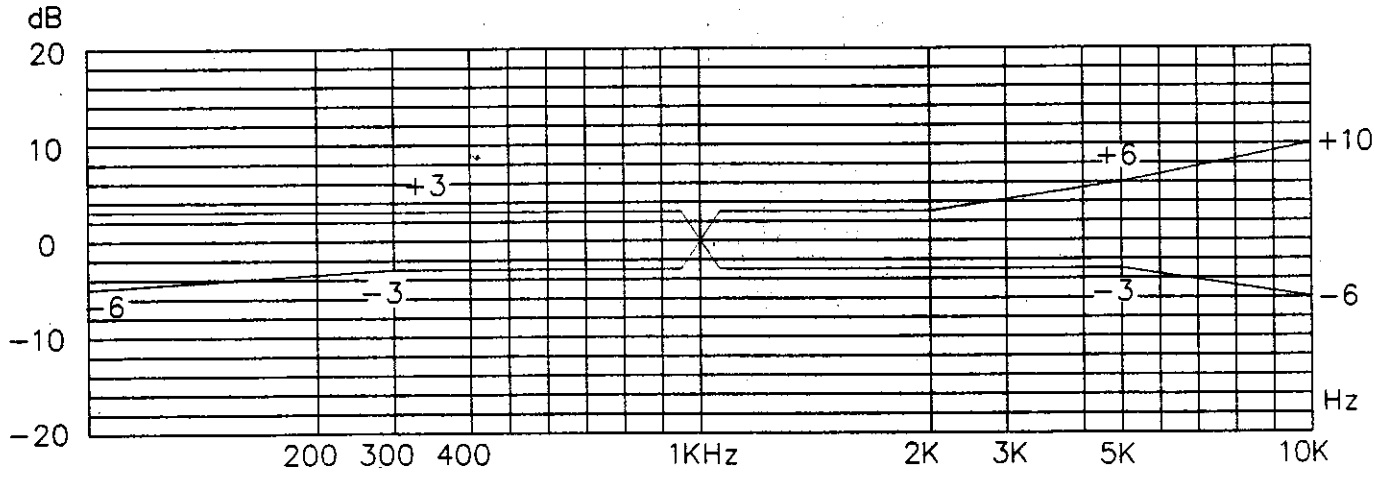
1.ELECTRICAL CHARACTERISTICS

Model No. : OBO-64SN-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	Idss	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	△S-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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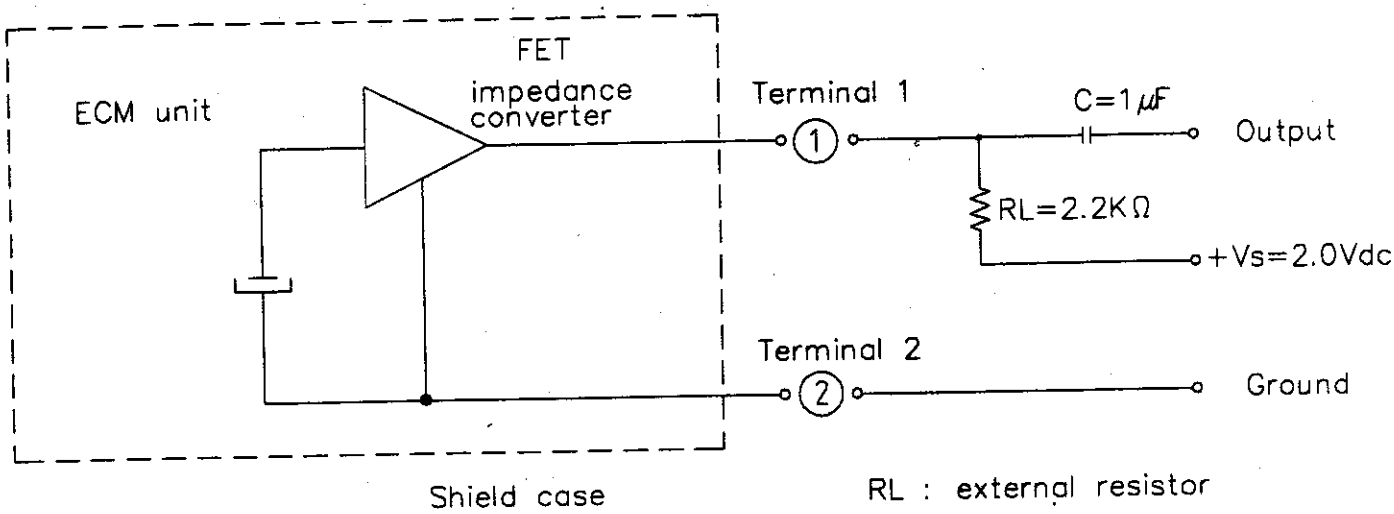
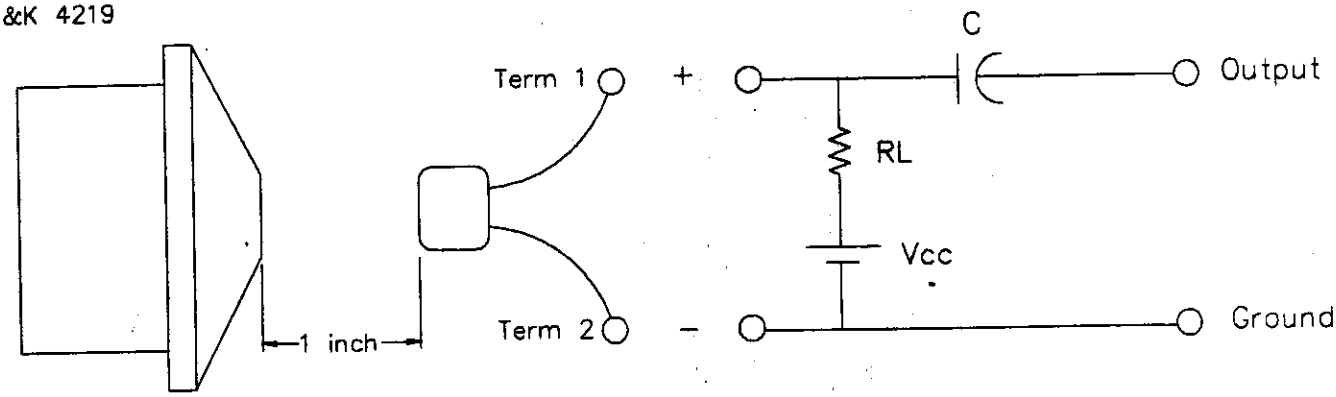
1.7 Measurement Circuit



1.8 Measurement Method

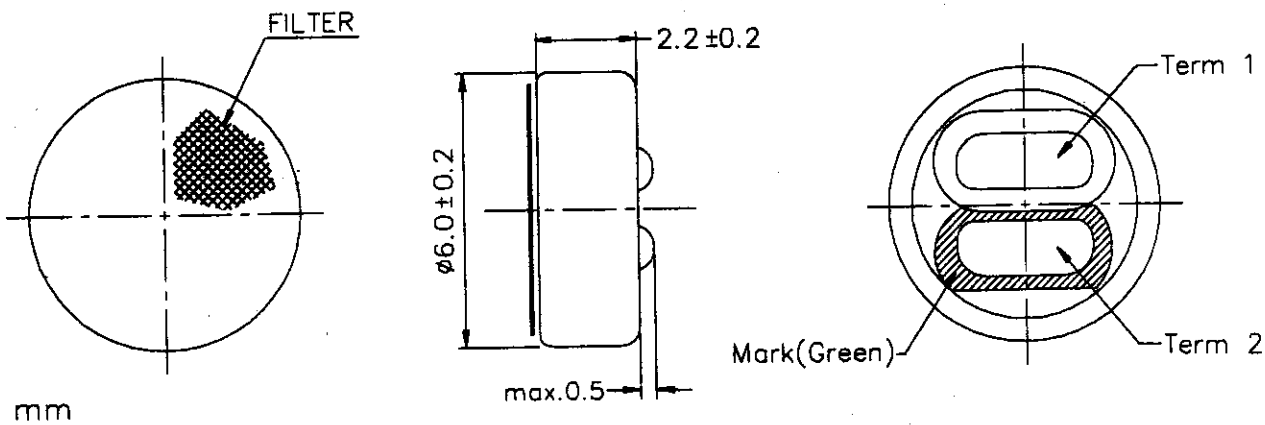
Artificial Mouth
B&K 4219

● NEAR FIELD TEST POSITION



2.MECHANICAL CHARACTERISTICS

2.1 Soldering Standard : 260±5°C / Max. 2 seconds
2.2 Weight : Appr.0.2g
2.3 Mechanical Layout and Dimensions :



Unit: mm

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3. TEMPERATURE CONDITIONS

3.1 Operating Temperature Range : −20°C +70°C

3.2 Storage Temperature Range : −40°C +85°C

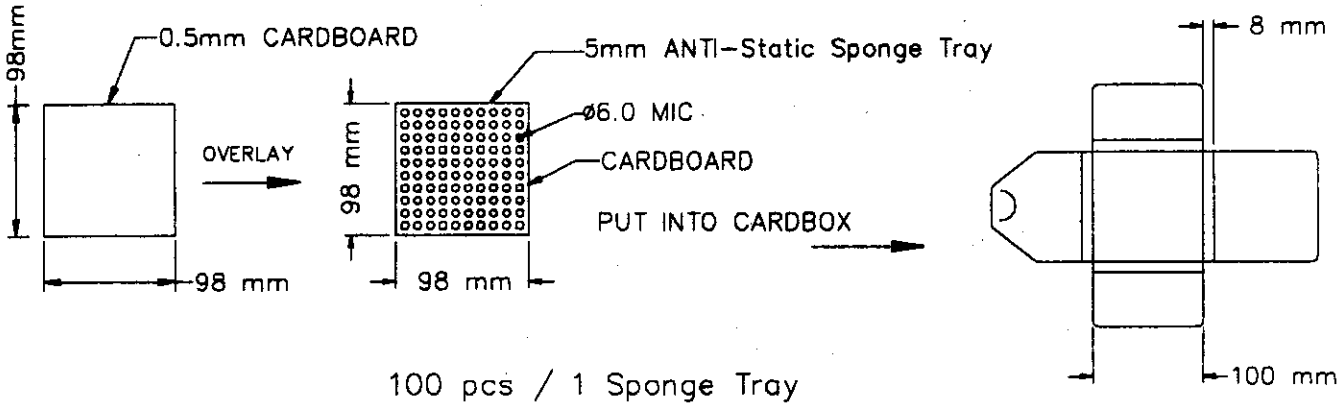
4. RELIABILITY TEST

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 axises.
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 ±3dB from initial sensitivity. (b)After exposure at −40°C for 240 hours, sensitivity to be within ±3dB 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 ±3dB 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°C for 1 hour, at 20°C for 10 minutes, 5 cycles, sensitivity to be within ±3dB from initial sensitivity. (The measurement to be done after 2 hours of conditioning at 20°C.)

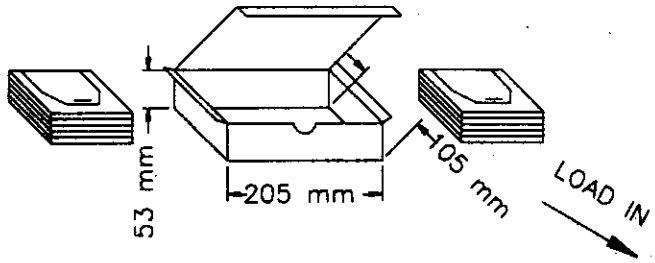
5. CONCEPT OF UNIT

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 unitis "Pascal" or "μbar". That is the sensitivity will be increased by 20dB in the usage of unit "Pascal". Example : −62dB(0dB=1V/μbar)=−42dB(0dB=1V/Pa)

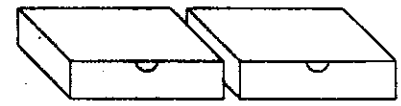
6. PACKAGING

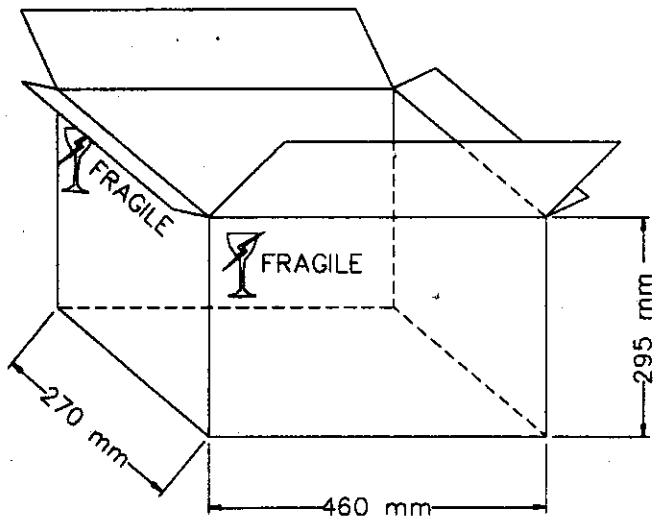


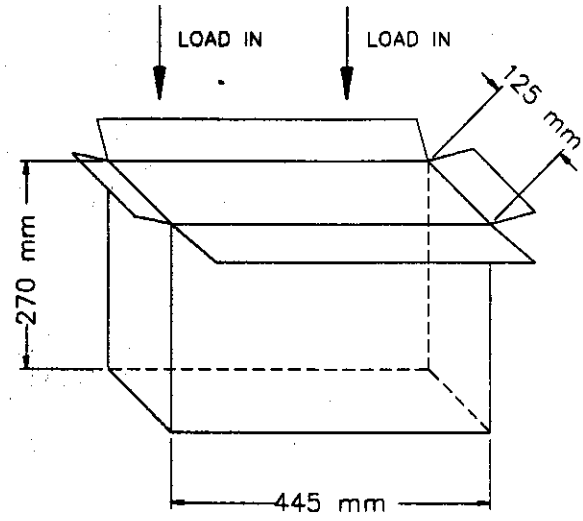
100 pcs / 1 Sponge Tray



10 CARDBOXES / PER SMALL BOX(1000 pcs)







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

LOAD IN

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

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