

文件发行章

OBO Pro.2.

SPECIFICATIONS

MODEL NO.
OBO-62SN-0B-012

PART NAME
Electret Condenser Microphone

SHEET
1 OF 6

ALTERNATION HISTORY

[illegible]

REV.	DATE	PREPARED BY	CHECKED BY	APPROVED BY
B	Aug,12,2005	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

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2005 AUG 13.
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PART NAME
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SHEET
2 OF 6

MODEL NO. : OBO-62SN-0B-012

Features : Pb-free Type

1.ELECTRICAL CHARACTERISTICS

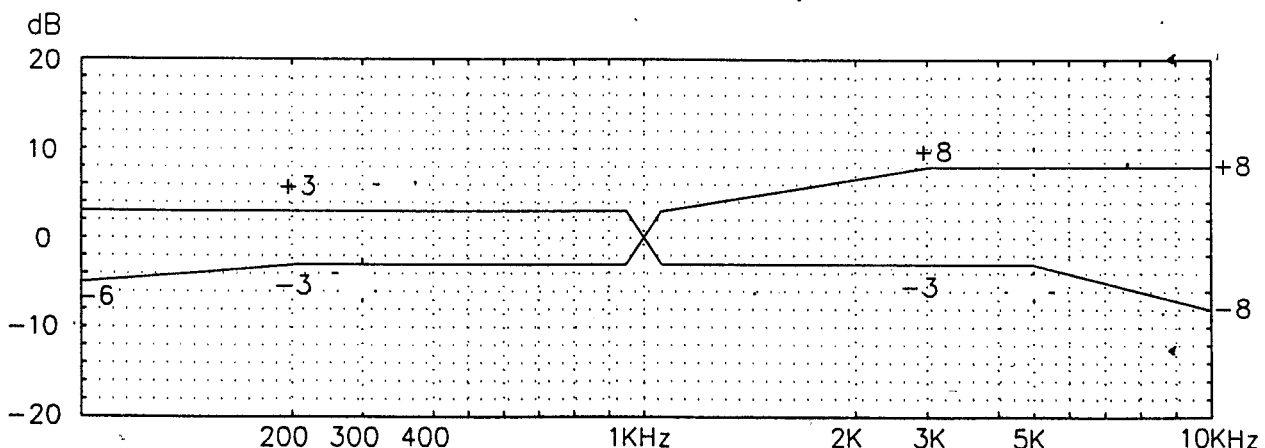
Test Condition: ($V_s=2.0V$, $2.2K\Omega$, $T_a=20\pm2^\circ$ R.H.= $65\pm5\%$)

Type: Back Electret Condenser Microphone ※1

Directivity : Omnidirectional

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	K Ω
1.3	Current Consumption	I _{DSS}	V _S =2.0V, R _L =2.2K Ω			500.	μA
1.4	Signal to Noise Ratio	S/N	S: (F=1KHz, S.P.L=1Pa) N: (A-Weighed Curve)	58			dB
1.5	Decreasing Voltage	$\Delta S-VS$	V _S =2.0V to 1.5V			-3	dB

1.6 Typical Frequency Response Curve Limit



◎ Frequency : 20~16,000Hz

◎ Operating Voltage : 1.1V to 10V

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OBO Pro.2®

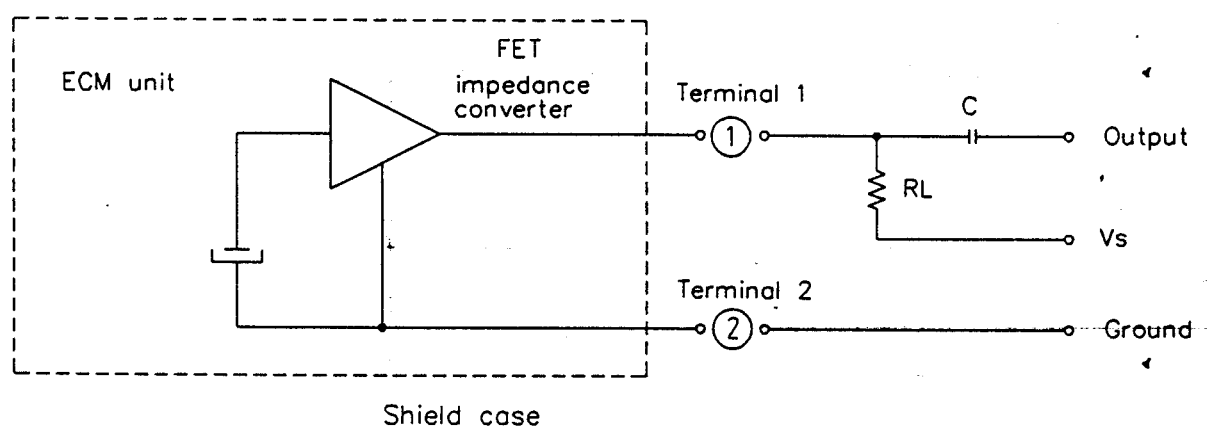
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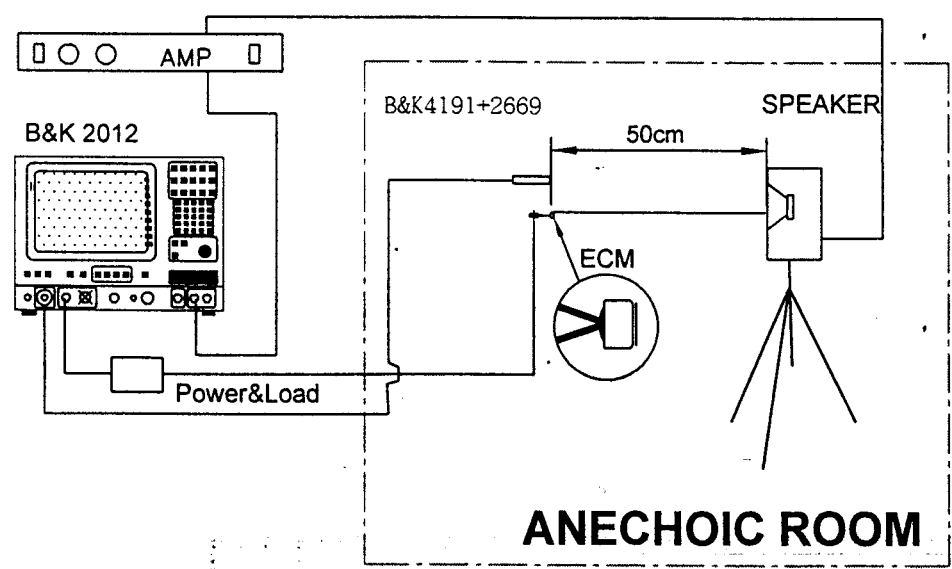
PART NAME
Electret Condenser Microphone

SHEET
3 OF 6

2. MEASUREMENT CIRCUIT



3. MEASUREMENT METHOD

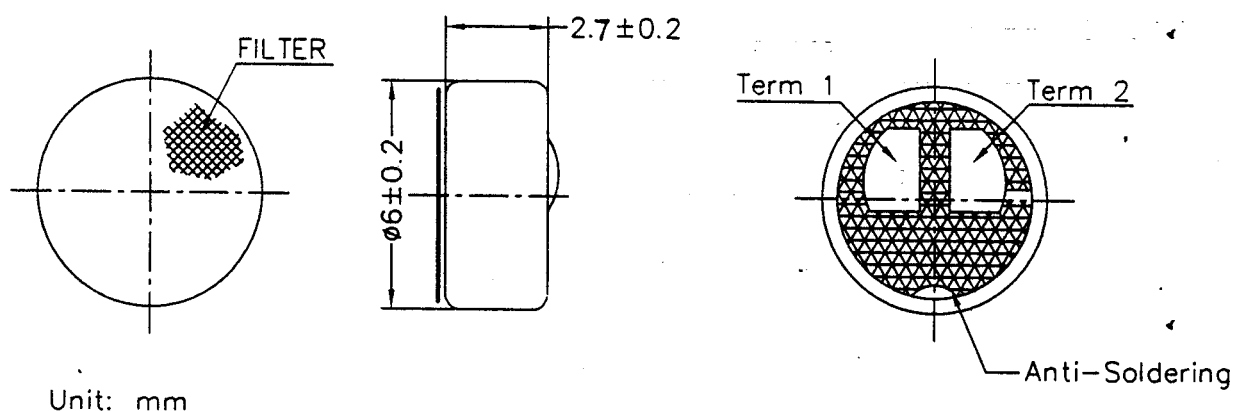


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4. MECHANICAL CHARACTERISTICS

- 4.1 Pull Strength Test: The microphone assembly shall suffer no change from a pull strength of 1.1 pound for 3 seconds applied between the connector and the microphone.
- 4.2 Soldering Standard : $260 \pm 5^{\circ}\text{C}$ /Max. 2 seconds.
- 4.3 Lead-free Soldering Standard : $280 \pm 5^{\circ}\text{C}$ /Max. 2.5 seconds.
- 4.4 Weight : Less than 0.5g
- 4.5 Mechanical Layout and Dimensions :



5. TEMPERATURE CONDITIONS

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

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

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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. (The measurement to be done after 2 hours of conditioning at 20°C. R.H 50%.)
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. (The measurement to be done after 2 hours of conditioning at 20°C. R.H 50%.)
Temperature Test	(a)After exposure at 70°C for 200 hours, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. (b)After exposure at -25°C for 200 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. R.H 50%.)
Humidity Test	After exposure at 40°C and 90~95% relative humidity for 200 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. R.H 50%.)
Temperature Cycle Test	After exposure at -25°C for 30 minutes, at 20°C for 10 minutes, at $+70^\circ\text{C}$ for 30 minutes, 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 R.H 50%.)

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

