

MODEL NO : OBO-06BN-0B-0E6

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

1. ELECTRICAL CHARACTERISTICS

Test Condition:(Vs=1.5 V,RL=2.2KΩ)

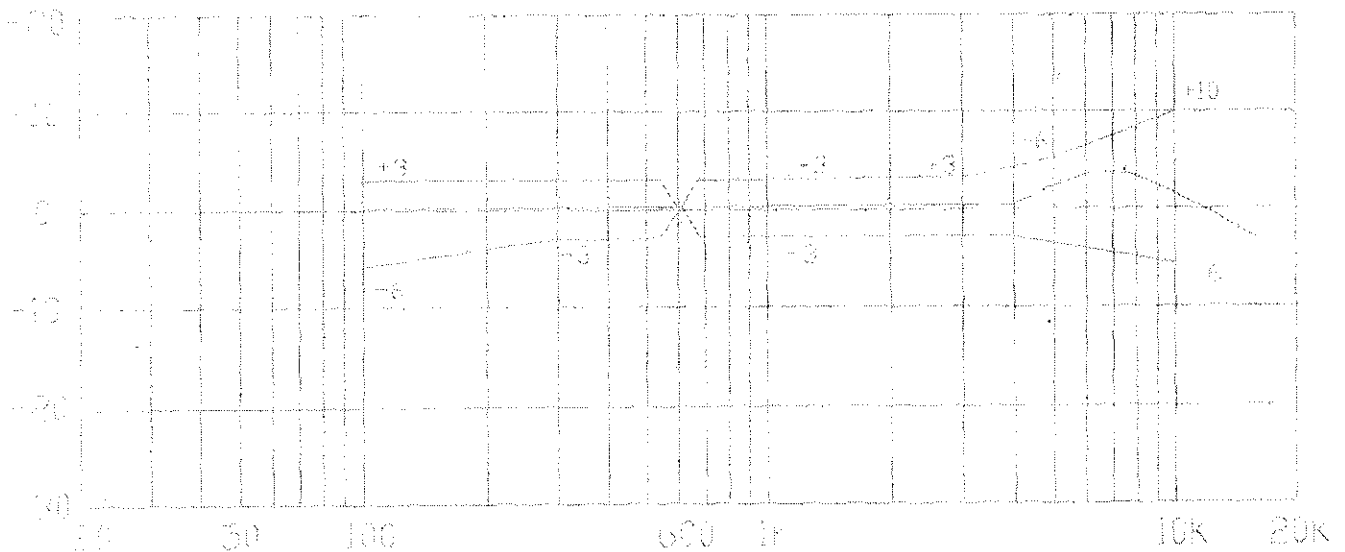
Directivity : Omnidirectional							
No	Parameter	Symbol	Condition	Limit			Unit
				Min	Center	Max	
1.1	Sensitivity	S	F=1KHz,S.P.L.=1Pa 0dB=1V/Pa	-49	-46	-43	dB
1.2	Output Impedance	Zout	F=1KHz			2.2	KΩ
1.3	Current Consumption	IDss	VS=1.5V, L=2.2KΩ			500	μA
1.4	Signal to Noise Ratio	S/N	S:(F=1KHz,S.P.L=1Pa) N:(A-Weighted Curve)	60			dB
1.5	Decreasing Voltage	ΔS-VS	VS=1.5V to 3.0V			-3	dB
1.6	Storage temp	°C	-20°C~+60°C				°C
1.7	Operating temp	°C	-20°C~+60°C				°C

1.8 Typical Frequency Response Curve Limit

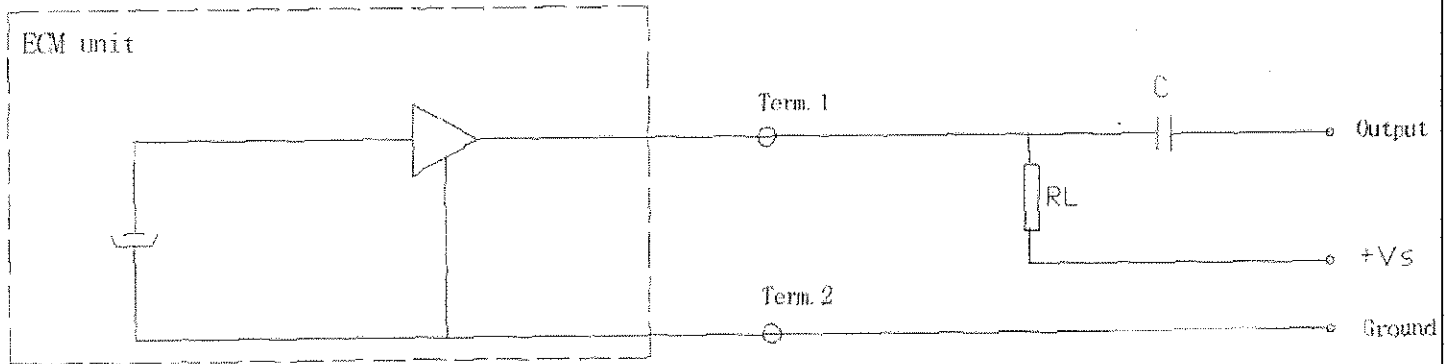
◎Frequency: 50~16,000Hz

◎Max Operatint Voltage: 10V

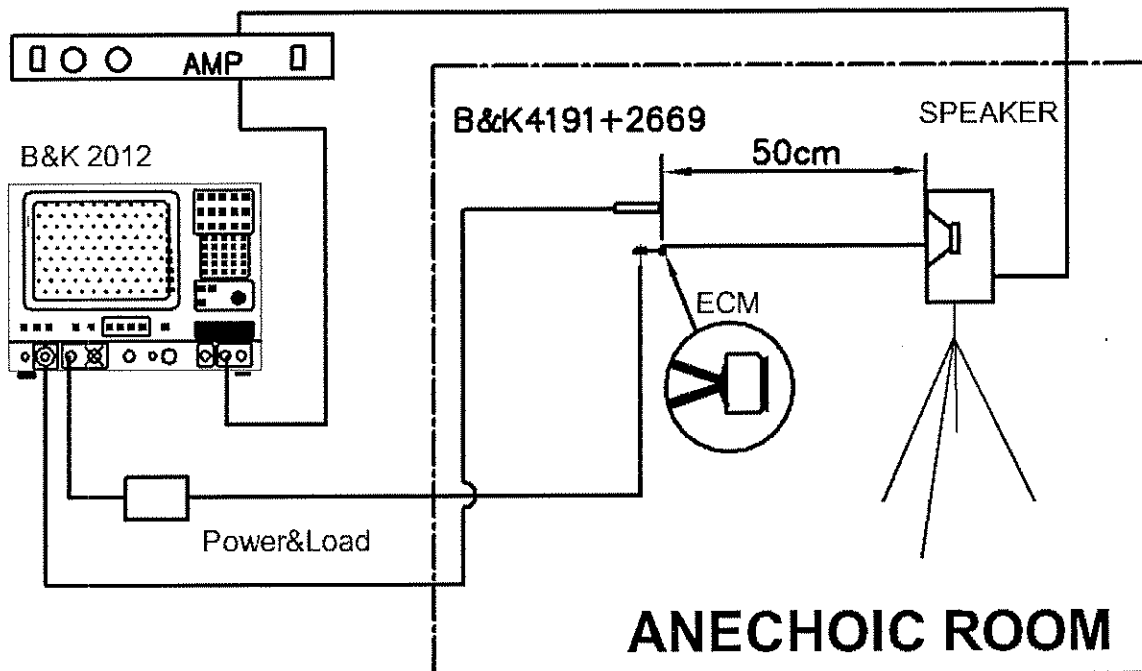
◎Standard Operatint Voltage: 1.5V



2. MEASUREMENT CIRCUIT



3. MEASUREMENT METHOD



OBO Pro.2

SPECIFICATIONS

MODEL NO
OBO-06BN-0B-0E6

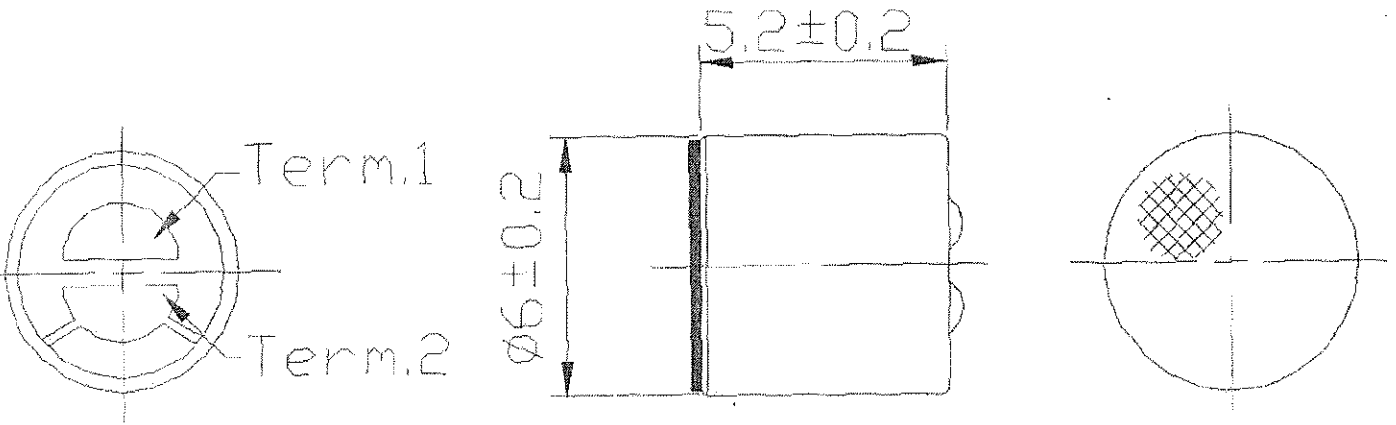
PART NAME
ELECTRET CONDENSER MICROPHONE

SHEET
4 OF 6

4. APPEARANCE DRAWING

4.1 Soldering Heat Resistance: Soldering iron of $+330\pm 5^{\circ}\text{C}$ should be placed on the terminal for 2 ± 0.5 seconds.

Unit:mm



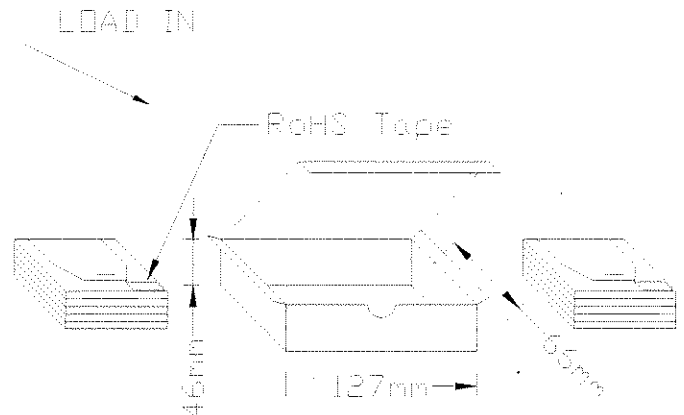
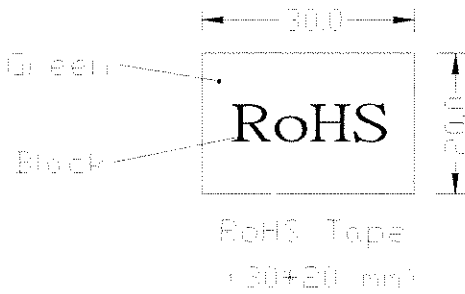
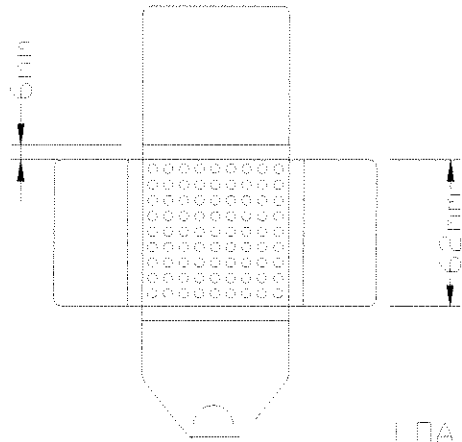
5. TEMPERATURE CONDITIONS5.1 Operating Temperature Range: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$ 5.2 Storage Temperature Range: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$ **6. RELIABILITY TEST**

Vibration Test	The part shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55hz band of vibration frequency to each of 3per-pendicular directions for 2hours.
Drop Test	The microphone unit without packaged must be subjected to each 3one time from 1 drops at 3 axes,the height of 1 meter to 20 mm thick wooden board.
Temperature	(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 -25°C for 72 hours, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. (The measurement to be done after 6 hours of conditioning at 25°C)
Humidity Test	After exposure at $+60^{\circ}\text{C}$ and 90%~95% relative humidity for 240hours. sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. (The measurement to be done after 6 hours of conditioning at 25°C)
Temperature Cycle Test	After exposure at $+70^{\circ}\text{C}$ for 1 hr, from $+70^{\circ}\text{C}$ to $+25^{\circ}\text{C}$ for 0.5 hr ,at $+25^{\circ}\text{C}$ for 1 hr, from $+25^{\circ}\text{C}$ to -20°C for 0.5 hr ,at -20°C for 1 hr, from -20°C to $+25^{\circ}\text{C}$ for 0.5 hr , after 10 cycles , sensitvity to be within $\pm 3\text{dB}$ from initial sensitivity. (The measurement to be done after 6 hours of conditioning at 25°C)

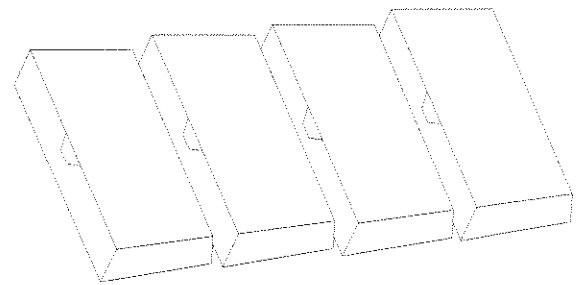
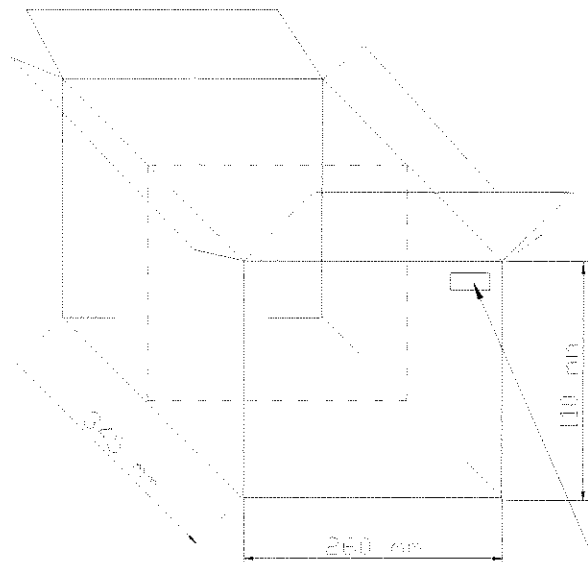
7. CONCEPT OF UNIT

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 : $-66\text{dB}(0\text{dB}=1\text{V}/\mu\text{bar})=-46\text{dB}(0\text{dB}=1\text{V}/\text{Pa})$

8. PACKAGING:



LOAD IN
10 small box/Every middle box (1000PCS)



RoHS Tape

CARTON (20000 pcs)