

SHEET
1 OF 6

REV.	DATE	PREPARED BY	CHECKED BY	APPROVED BY
A	MAR,02,2010			

MODEL NO : OBO-08DN-0C-117

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

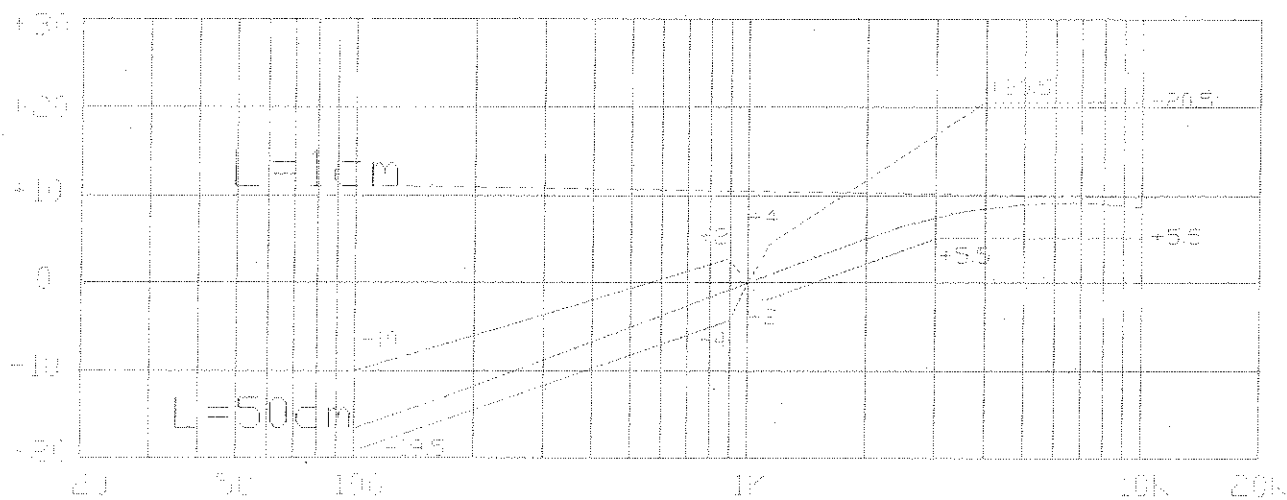
1. ELECTRICAL CHARACTERISTICS

Test Condition:(Vs=2.0V,RL=2.2KΩ,Ta=20±2℃,R.H.=65±5%)

Directivity : Noise Cancelling

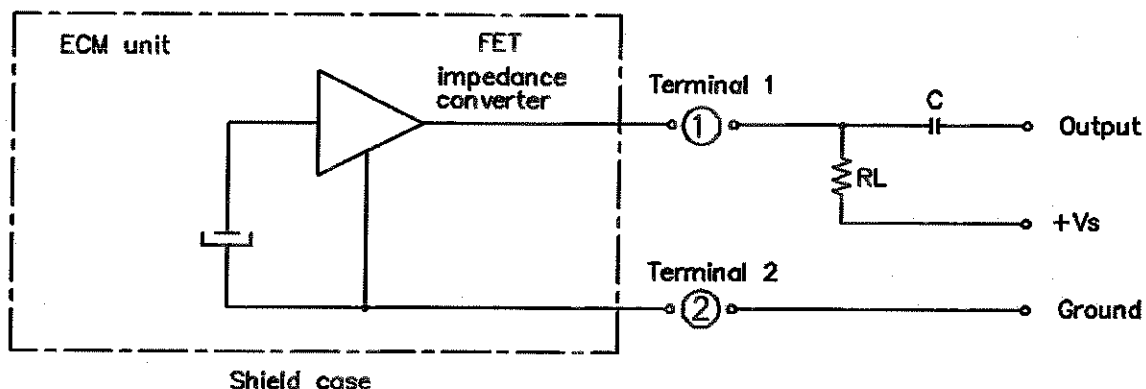
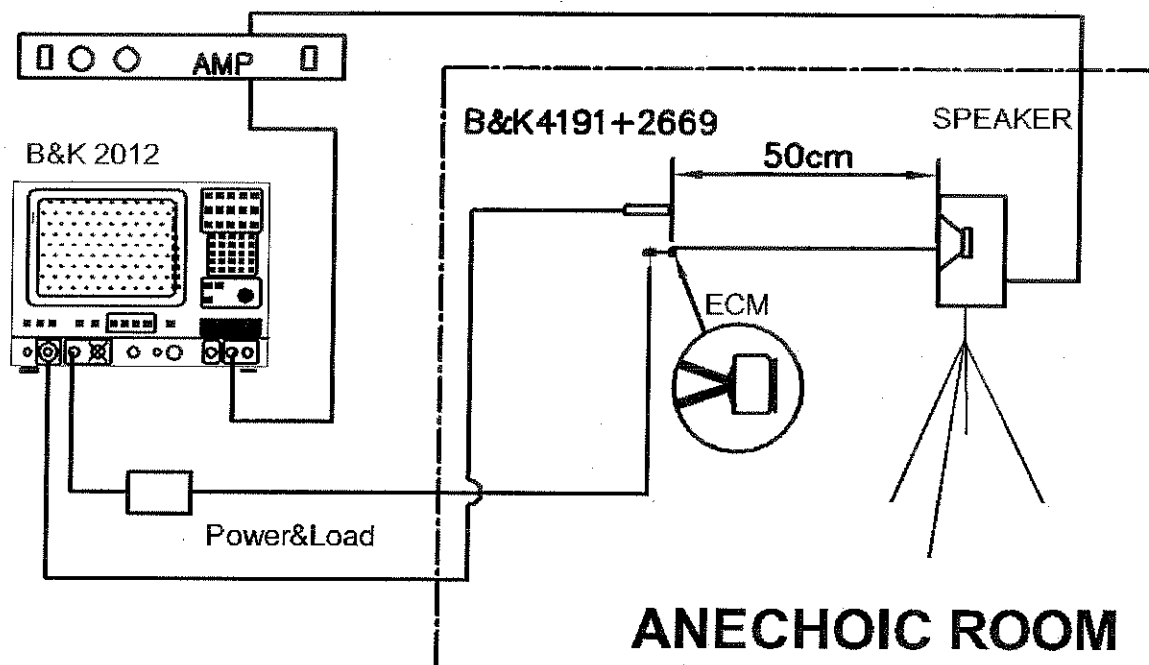
No	Parameter	Symbol	Condition	Limit			Unit
				Min	Center	Max	
1.1	Sensitivity	S	F=1KHz,S.P.L.=1Pa 0dB=1V/Pa	-51	-47	-43	dB
1.2	Output Impedance	Zout	F=1KHz			2.2	KΩ
1.3	Current Consumption	IDss	VS=2.0V, L=2.2KΩ			500	μA
1.4	Signal to Noise Ratio	S/N	S:(F=1KHz,S.P.L.=1Pa) N:(A-Weighted Curve)	60			dB
1.5	Decreasing Voltage	△S-VS	VS=1.5V to 3.0V			-3	dB

1.6 Typical Frequency Response Curve Limit



◎Frequency: 50~16,000Hz

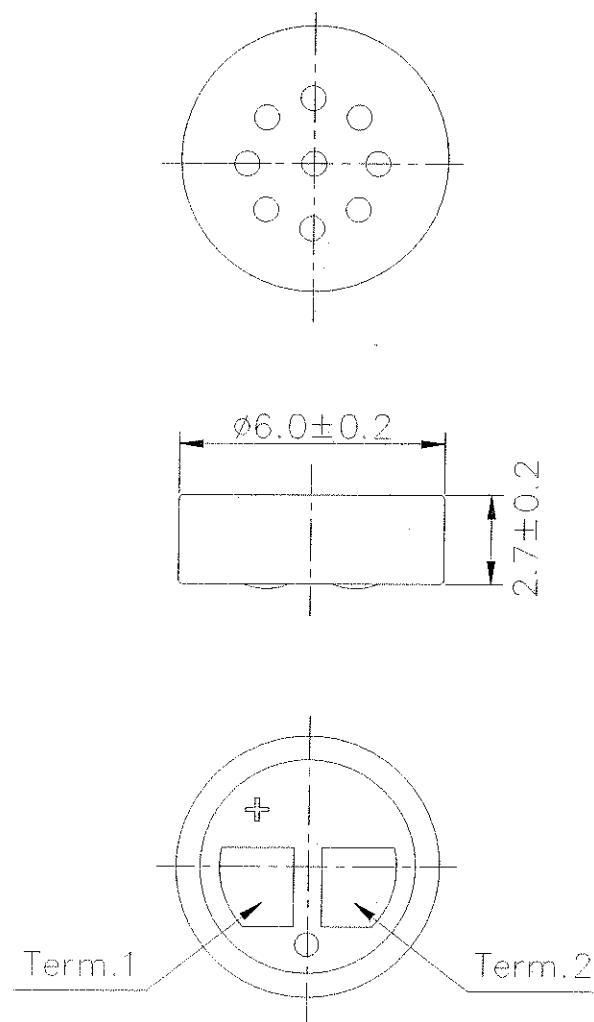
◎Max Operatint Voltage: 10V

2.MEASUREMENT CIRCUIT**3.MEASUREMENT METHOD**

4.ASS'Y DRAWING4.1 Soldering Standard : $330 \pm 5^{\circ}\text{C}$ / Max. 2 seconds

4.2 Mechanical Layout and Dimensions :

Unit: mm



5. TEMPERATURE CONDITIONS

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

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

6. RELIABILITY TEST

Vibration Test	To be no interference in operation after vibrations, 10Hz to 55Hz for 1 minute full amplitude 1.5mm, for 2 hours at 3 axes .
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 " 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 : $-67\text{dB}(0\text{dB}=1\text{V}/\mu\text{bar})=-47\text{dB}(0\text{dB}=1\text{V}/\text{Pa})$

8. PACKAGING

