
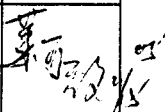
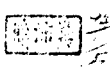
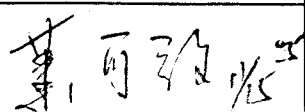


OBO Pro.2	SPECIFICATIONS	MODEL NO. OBO-20DN-0C-002
	PART NAME ELECTRET CONDENSER MICROPHONE	SHEET 1 OF 6

ALTERNATION HISTORY

Marking	Date	ECN. NO.	REV.	Description	Page	PREPARE BY	APPROVE BY
※1	NOV,07'05	0510003	D	Change the high size & Conformity RoHS Directive (2002/95/EC) Requests.	6		

REV.	DATE	PREPARED BY	CHECKED BY	APPROVED BY
D	NOV,07,2005	LULU		

OBO Pro.2	SPECIFICATIONS	MODEL NO. OBO-20DN-0C-002
	PART NAME ELECTRET CONDENSER MICROPHONE	SHEET 2 OF 6

MODEL NO : OBO-20DN-0C-002

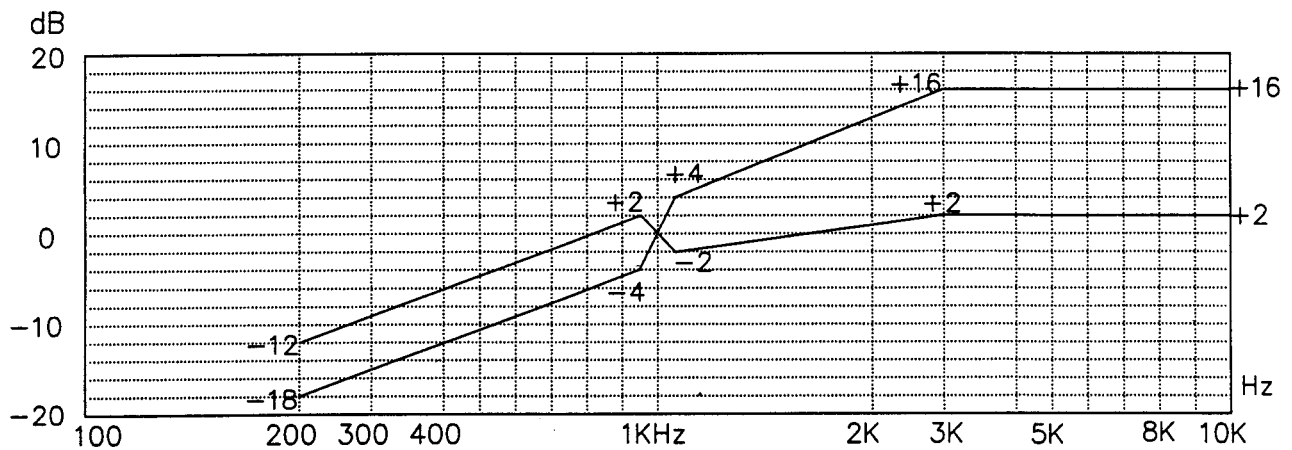
Features : Conformity RoHS Directive (2002/95/EC) Requests. ※1

1. ELECTRICAL CHARACTERISTICS

Test Condition : (Vs=1.5V,RL=680 Ω,Ta=20±2°C,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	-54	-50	-46	dB
1.2	Output Impedance	Zout	F=1KHz			680	Ω
1.3	Current Consumption	I _{oss}	VS=1.5V, RL=680Ω			500	μA
1.4	Signal to Noise Ratio	S/N	S:(F=1KHz, S.P.L=1Pa) N:(A-Weighted Curve)	56			dB
1.5	Decreasing Voltage	Δ S-VS	VS=1.5V to 1.1V			-3	dB

1.6 Typical Frequency Response Curve Limit ※1

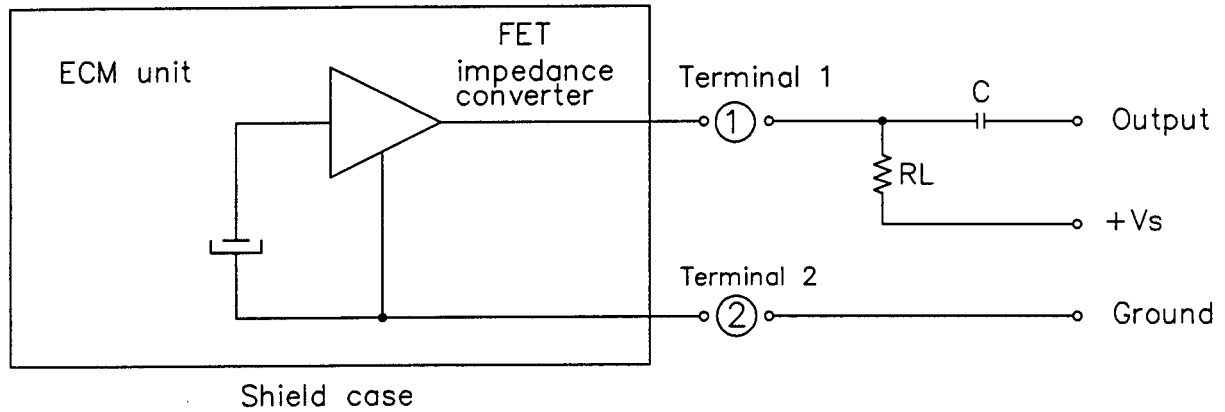


◎ Frequency : 100~10,000Hz

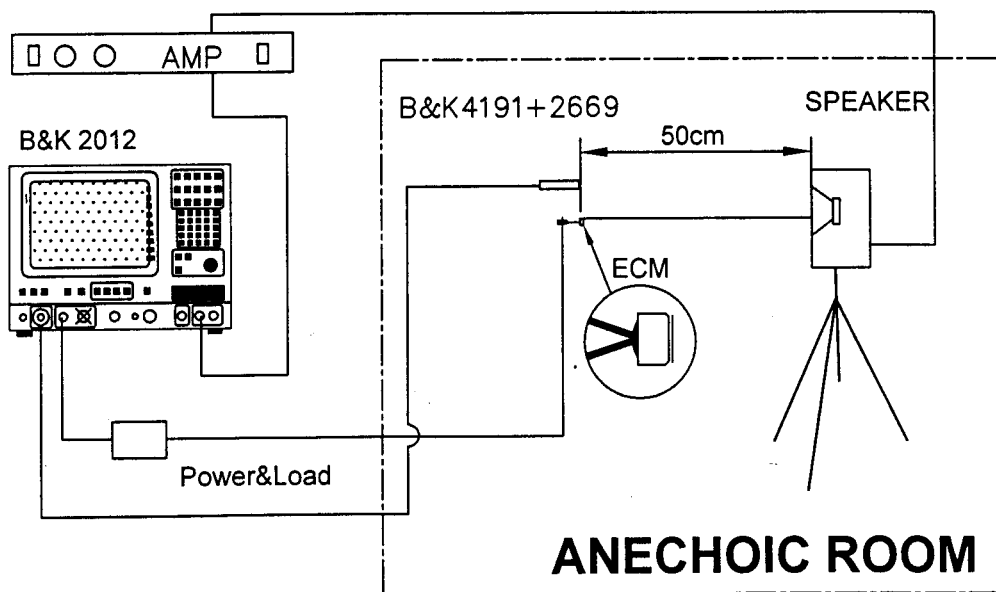
◎ Operating Voltage : 1.1V to 10V

OBO Pro.2	SPECIFICATIONS	MODEL NO. OBO-20DN-0C-002
	PART NAME ELECTRET CONDENSER MICROPHONE	SHEET 3 OF 6

2. MEASUREMENT CIRCUIT



3. MEASUREMENT METHOD

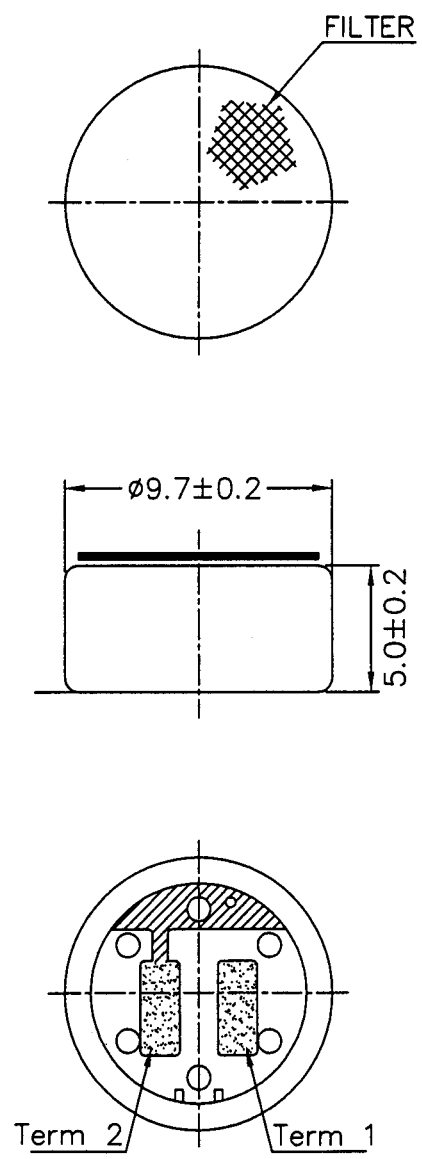


OBO Pro.2	SPECIFICATIONS	MODEL NO. OBO-20DN-0C-002
	PART NAME ELECTRET CONDENSER MICROPHONE	SHEET 4 OF 6

4.MECHANICAL CHARACTERISTICS

- 4.1 Soldering Standard : $300\pm 5^{\circ}\text{C}$ / Max. 2 seconds
- 4.2 Weight : Appr.1.0g
- 4.3 Mechanical Layout and Dimensions :

Unit : mm



OBO Pro.2	SPECIFICATIONS	MODEL NO. OBO-20DN-0C-002
	PART NAME ELECTRET CONDENSER MICROPHONE	SHEET 5 OF 6

5. TEMPERATURE CONDITIONS

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

5.2 Storage Temperature Range : $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$

6. RELIABILITY TEST ^{※1}

Vibration Test	The microphone unit must be subjected to a procedure that after vibrating for 2 hours from each of the two directions with a frequency of 10–55Hz and a 1.52mm–high amplitude.
Drop Test	The microphone unit must be subjected to a procedure that after dropping to a slippery marble floor for 5 times from a 1–meter–high without package.
Temperature Test	(a)After exposure at $+70^{\circ}\text{C}$ 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 3 hours of conditioning at 20°C)
Humidity Test	The microphone unit must be subjected to $+40^{\circ}\text{C}, 93\% \text{RH}$ –for 200 Hours , and expose to room temp for 3 Hours.
Temperature Cycle Test	The microphone unit must be subjected to following conditions ($+50^{\circ}\text{C}$ 1H–room temp 1H; -10°C 1H–room temp 1H) at 5 cycle, and exposed to room temperature for 3 hours, sensitivity to be within $\pm 3\text{dB}$

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 : $-62\text{dB}(\text{OdB}=1\text{V}/\mu\text{bar})=-42\text{dB}(\text{OdB}=1\text{V}/\text{Pa})$

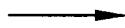
OBO Pro.2	SPECIFICATIONS	MODEL NO. OBO-20DN-0C-002
	PART NAME ELECTRET CONDENSER MICROPHONE	SHEET 6 OF 6

8. PACKAGING ※1

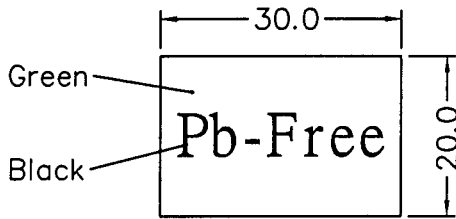
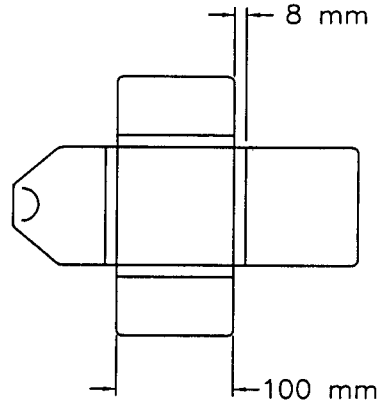


MIC

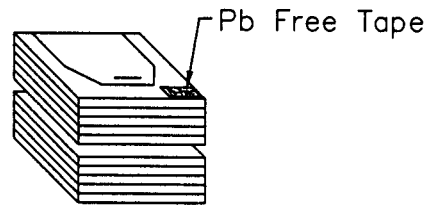
PUT INTO CARDBOX



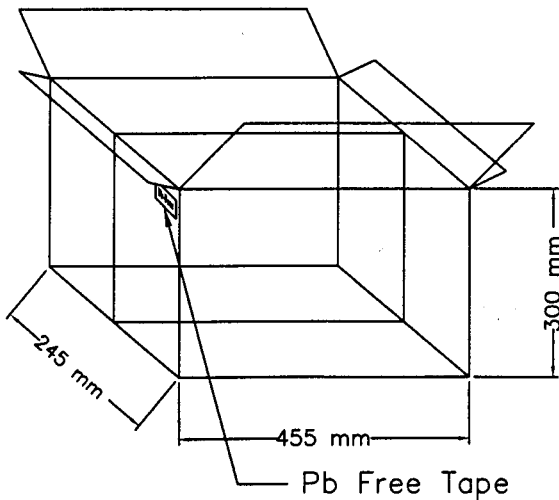
100 pcs / 1 Tray



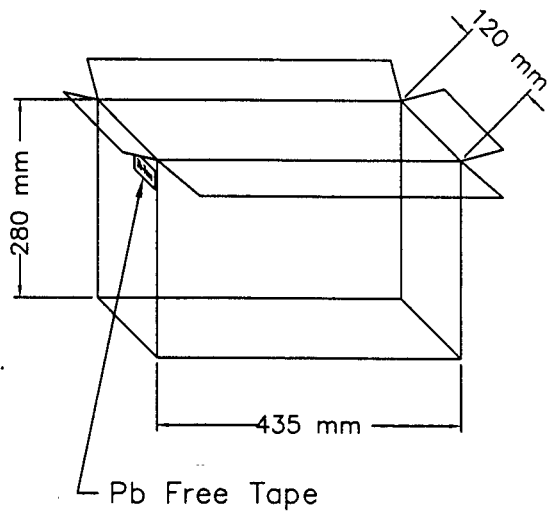
Pb Free Tape
(30*20 mm)



LOAD IN



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



100 CARD BOXES / PER
MIDDLE BOX(10000 pcs)
(IMPORTED CARTON MATERIAL)