

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

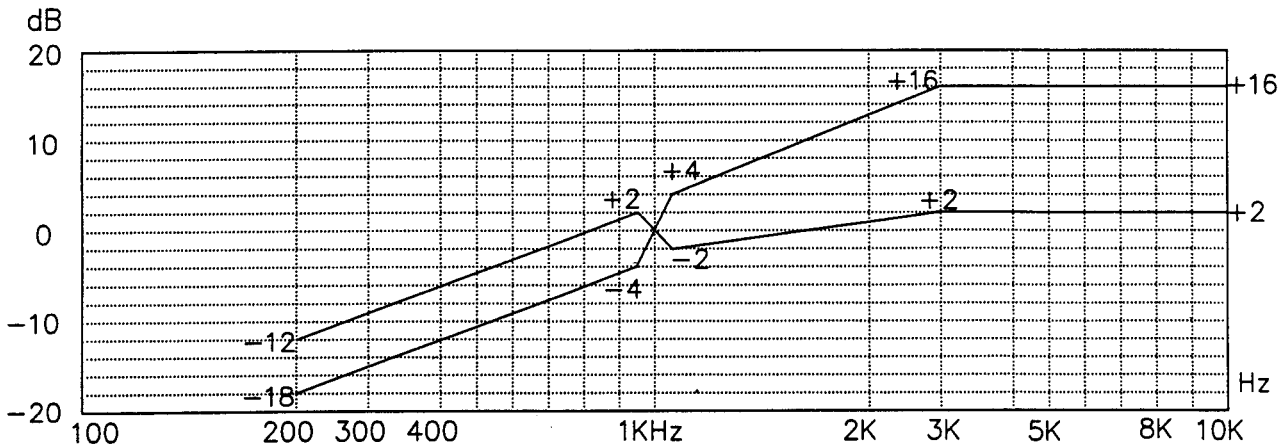
Features : Conformity RoHS Directive (2002/95/EC) Requests. ※1

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

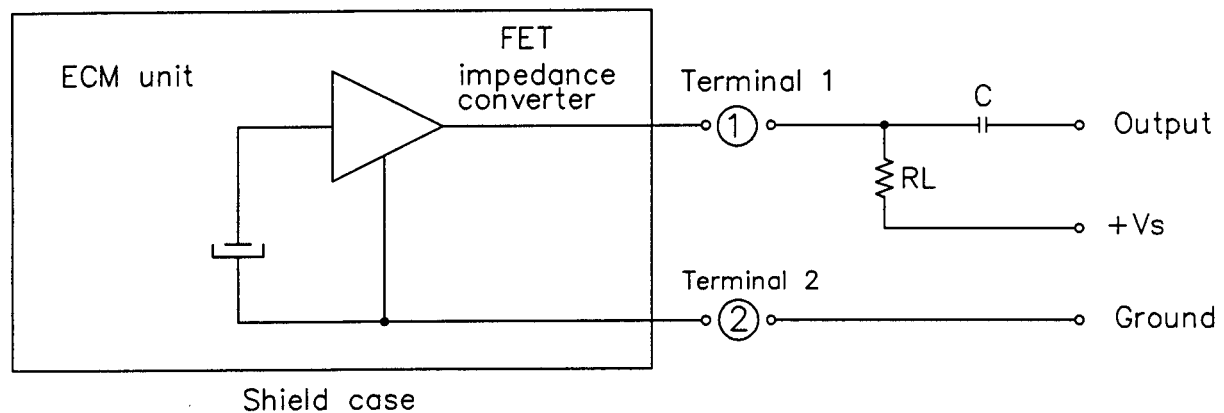
1.6 Typical Frequency Response Curve Limit ※1



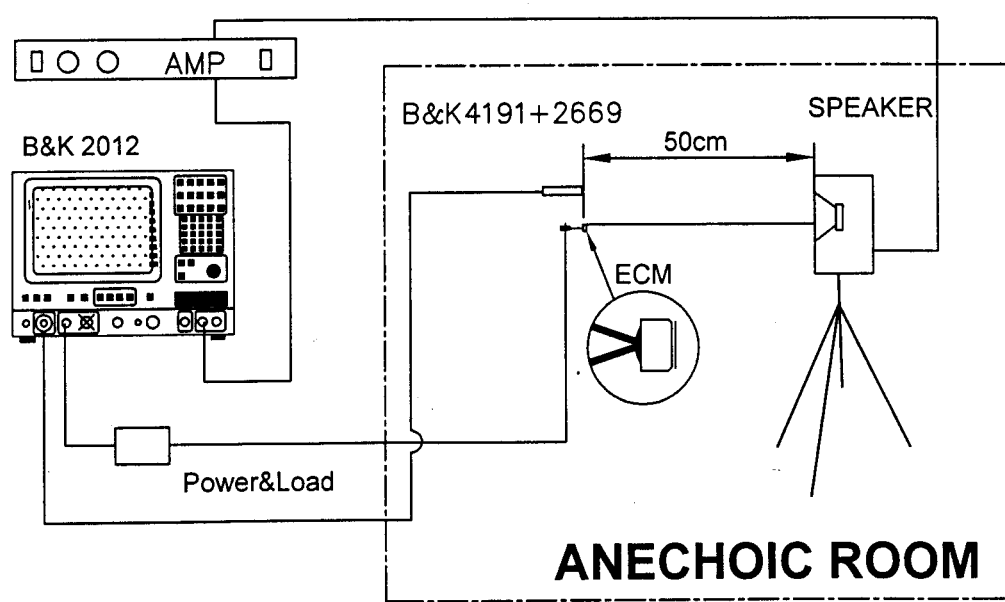
- ◎ Frequency : 100~10,000Hz
- ◎ Operating Voltage : 1.1V to 10V

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2. MEASUREMENT CIRCUIT



3. MEASUREMENT METHOD



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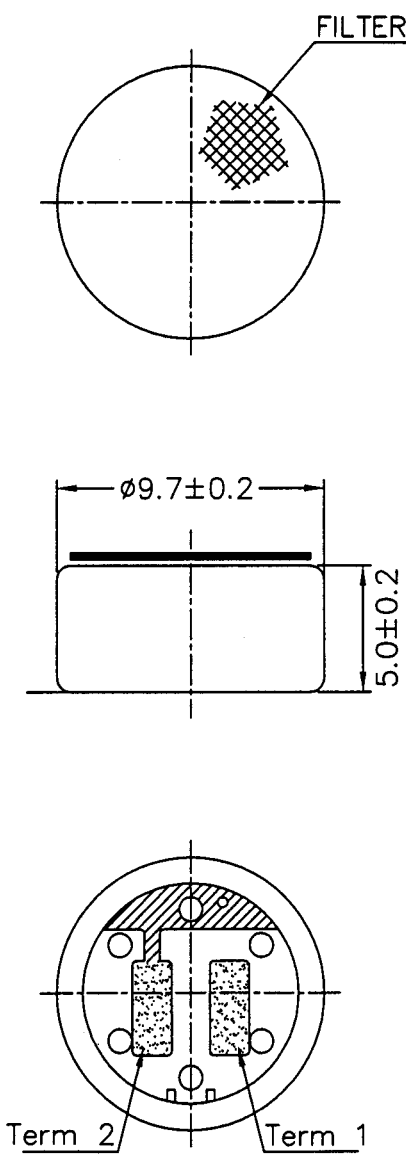
4.MECHANICAL CHARACTERISTICS

4.1 Soldering Standard : $300\pm5^{\circ}\text{C}$ / Max. 2 seconds

4.2 Weight : Appr.1.0g

4.3 Mechanical Layout and Dimensions :

Unit : mm



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5. TEMPERATURE CONDITIONS

- 5.1 Operating Temperature Range : -20℃ ~ +60℃
- 5.2 Storage Temperature Range : -40℃ ~ +70℃

6. RELIABILITY TEST※1

Vibration Test	The microphone unit must be subjected to a procedure that after vinrating 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℃ for 200 hours, sensitivity to be within ±3dB from initial sensitivity. (b)After exposure at –25℃ for 200 hours, sensitivity to be within ±3dB from initial sensitivity. (The measurement to be done after 3 hours of conditioning at 20℃)
Humidity Test	The microphone unit must be subjected to +40℃,93% 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℃ 1H–room temp 1H; –10℃ 1H–room temp 1H) at 5 cycle, and exposed to room temperature for 3 hours, sensitivity to be within ±3dB

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 : –62dB(0dB=1V/μbar)=–42dB(0dB=1V/Pa)

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8. PACKAGING ※1

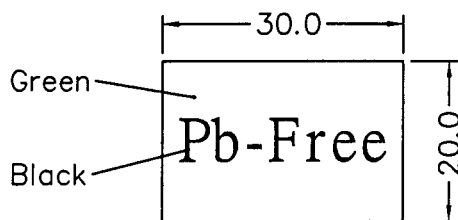
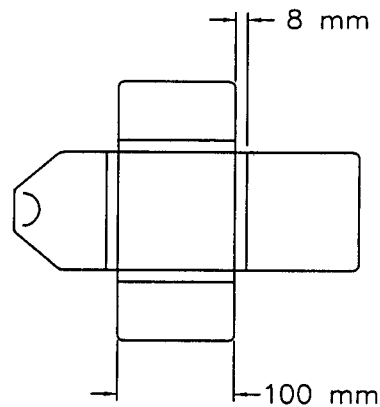


MIC

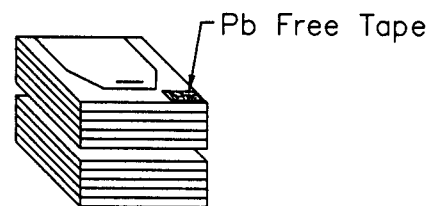
PUT INTO CARDBOX



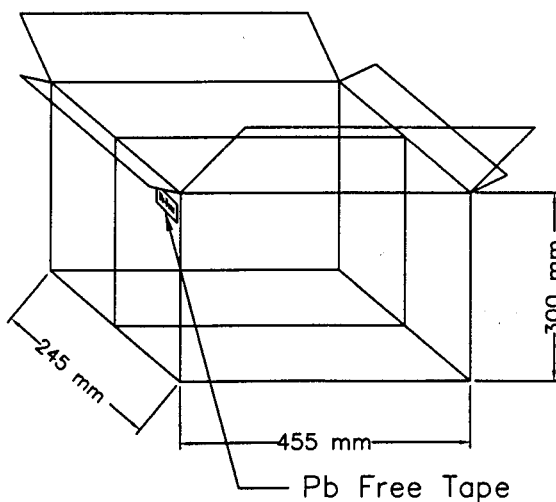
100 pcs / 1 Tray



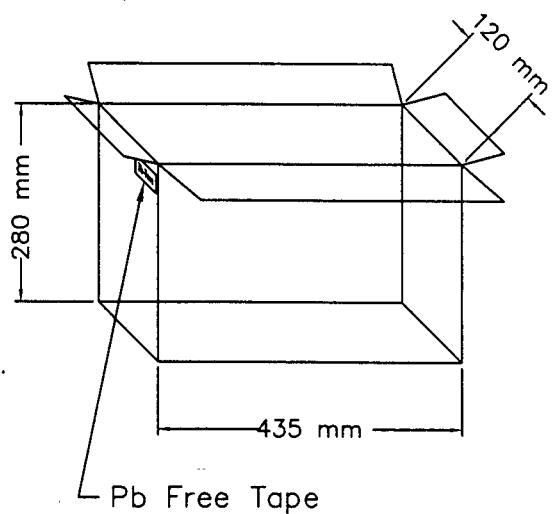
Pb Free Tape
(30*20 mm)



LOAD IN



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



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