

OBO Pro.2.	SPECIFICATIONS	MODEL NO. OBO-B43KP-0B-012
	PART NAME ELECTRET CONDENSER MICROPHONE	SHEET 1 OF 6

ALTERNATION HISTORY

Marking	Date	ECN NO.	REV.	Description	Page	PREPARE BY	APPROVE BY
---	AUG,10'07	----	A	New Document	6	MIA	<input type="checkbox"/> 陳建台

REV.	DATE	PREPARED BY	CHECKED BY	APPROVED BY
A	AUG.10,2007	MIA	Darren	<input type="checkbox"/> 陳建台

OBO Pro.2	SPECIFICATIONS	MODEL NO. OBO-B43KP-0B-012
	PART NAME ELECTRET CONDENSER MICROPHONE	SHEET 2 OF 6

MODEL NO : OBO-B43KP-0B-012

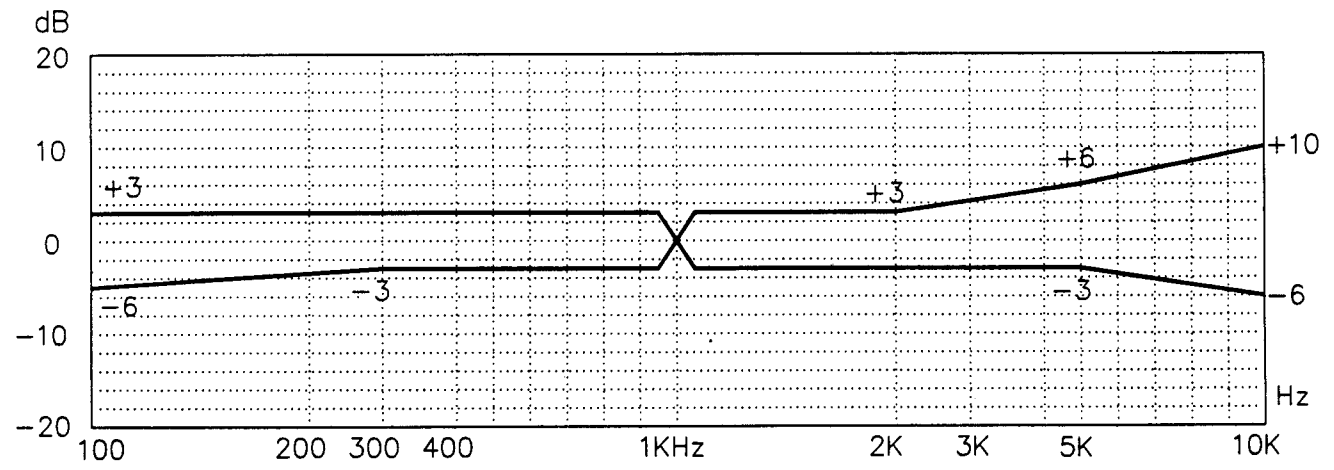
Features : Conformity RoHS Directive (2002/95/EC) Requests.

1. ELECTRICAL CHARACTERISTICS

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

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	KΩ
1.3	Current Consumption	I _{oss}	VS=2.0V, RL=2.2KΩ			500	μA
1.4	Signal to Noise Ratio	S/N	S: (F=1KHz, S.P.L.=1Pa) N: (A-Weighted Curve)	58			dB
1.5	Decreasing Voltage	Δ S-VS	VS=3.0V to 1.5V			-3	dB

1.6 Typical Frequency Response Curve Limit



◎ Frequency : 100~10,000Hz

◎ Operating Voltage : 1.0V to 10V

OBO Pro.2

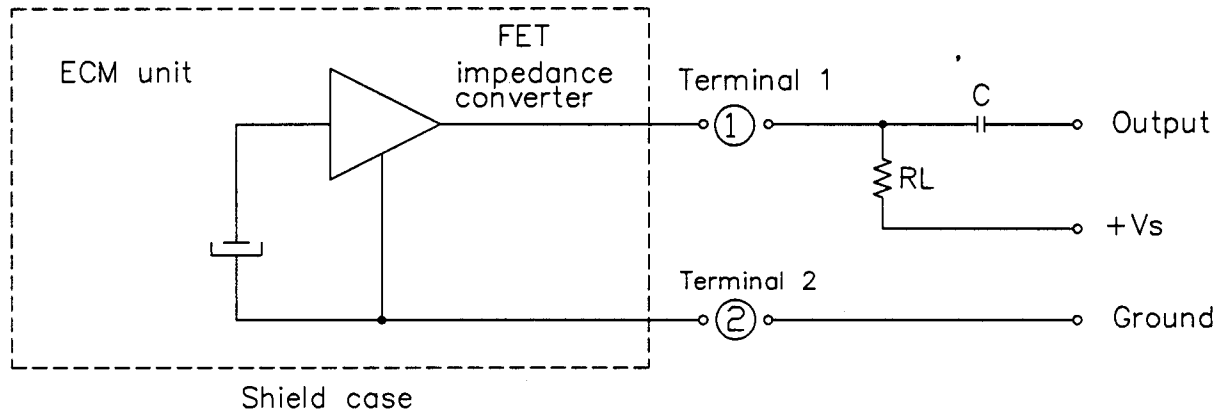
SPECIFICATIONS

MODEL NO.
OBO-B43KP-0B-012

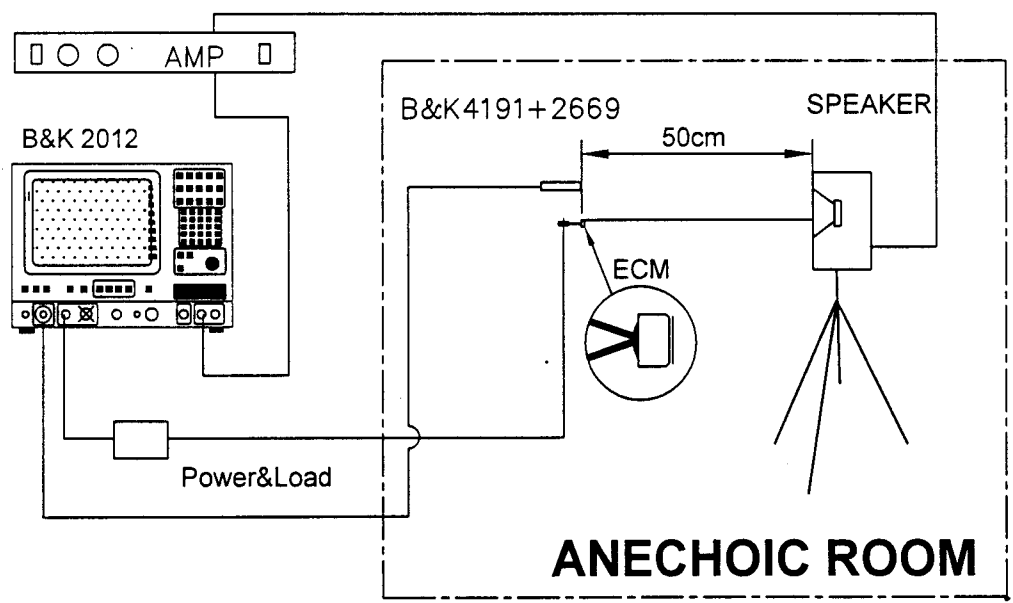
PART NAME
ELECTRET CONDENSER MICROPHONE

SHEET
3 OF 6

2. MEASUREMENT CIRCUIT



3. MEASUREMENT METHOD



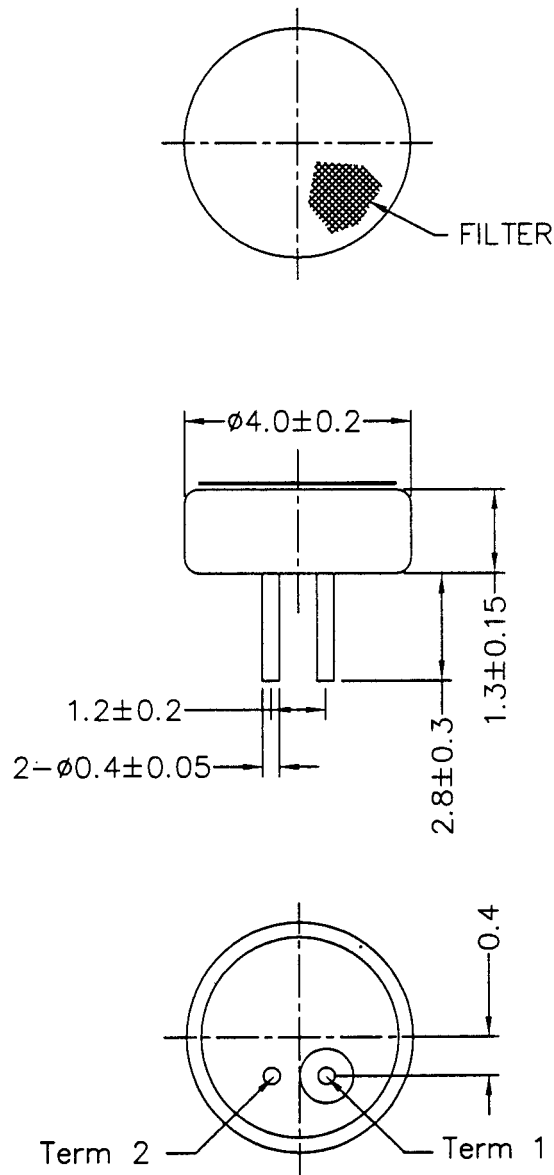
OBO Pro.2	SPECIFICATIONS	MODEL NO. OBO-B43KP-0B-012
	PART NAME ELECTRET CONDENSER MICROPHONE	SHEET 4 OF 6

4. MECHANICAL CHARACTERISTICS

4.1 Soldering Standard : $320 \pm 10^{\circ}\text{C}$ / Max. 2 seconds

4.2 Weight : Appr.0.1g

4.3 Mechanical Layout and Dimensions :



Unit : mm

OBO Pro.2	SPECIFICATIONS	MODEL NO. OBO-B43KP-0B-012
	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 : $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$

6. RELIABILITY TEST

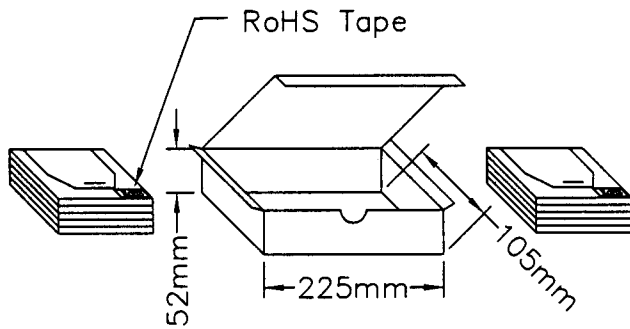
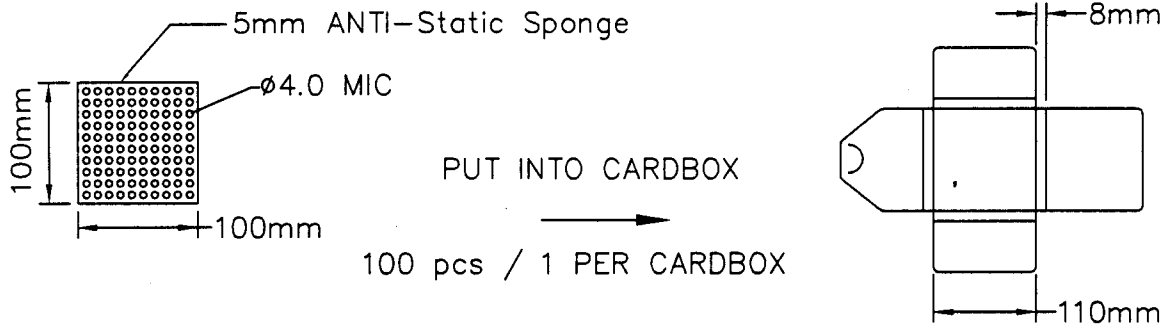
Vibration Test	To be no interference in operation after vibrations, 10Hz to 55Hz for 1 minute full amplitude 1.5mm, for 2 hours at 3 axes.
Drop Test	The microphone unit without packaged must be subjected to each 3 drops at 3 axes, the height of 1 meter to 20 mm thick wooden board.
Temperature Test	(a) After exposure at 70°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°C and $90 \pm 5\%$ relative humidity for 240 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 .)
Temperature Cycle Test	After exposure at $+70^{\circ}\text{C}$ for 1 hr, from $+70^{\circ}\text{C}$ to $+25^{\circ}\text{C}$ for 0.5hr, at $+25^{\circ}\text{C}$ for 1hr, from $+25^{\circ}\text{C}$ to -20°C for 0.5hr, at -20°C for 1hr, from -20°C to $+25^{\circ}\text{C}$ for 0.5hr, at $+25^{\circ}\text{C}$ for 1hr, after 10 cycles, the sensitivity 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

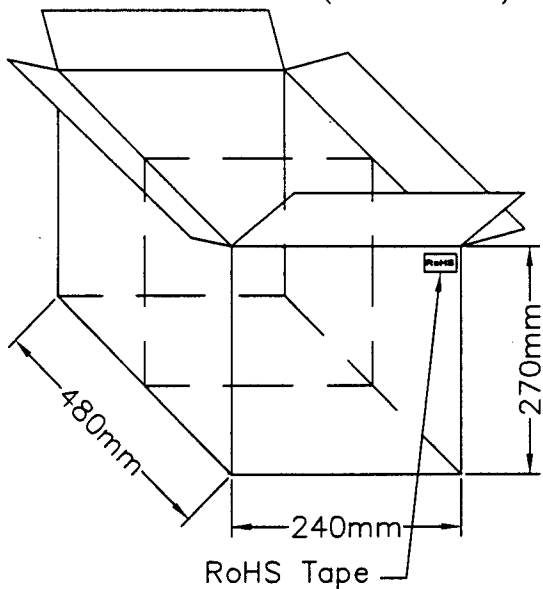
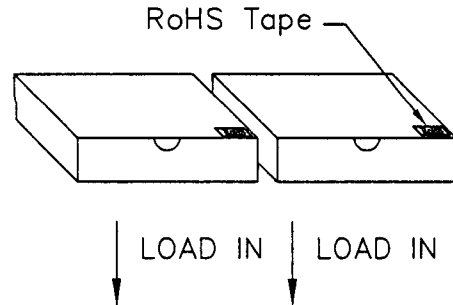
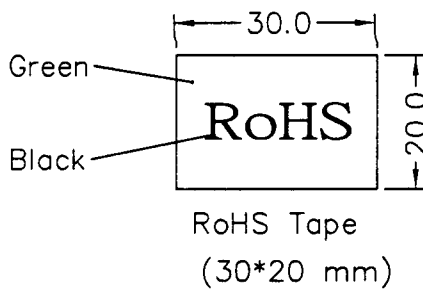
The difference between concept of unit "Pascal" and the one of unit " μbar " can be explained as follows. in calibrating the sensitivity of ECMS. the sensitivity is manifested differently according as the unit is "Pascal" or " μbar ". That is the sensitivity will be increased by 20dB in the usage of 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-B43KP-0B-012
	PART NAME ELECTRET CONDENSER MICROPHONE	SHEET 6 OF 6

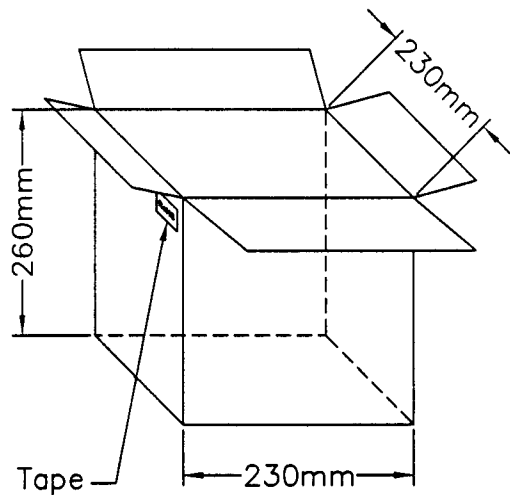
8. PACKAGING



10 CARDBOXES / PER
SMALL BOX(1000 pcs)



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



LOAD IN
 10 SMALL BOXES / PER
MIDDLE BOX(10000 pcs)
(IMPORTED CARTON MATERIAL)