



SPECIFICATIONS

MODEL NO
OBO-B41SN-0B-012

PART NAME
ELECTRET CONDENSER MICROPHONE

SHEET
1 OF 5

ALTERNATION HISTORY

Marking	Date	ECN NO.	REV	Description	Page	PREPARE BY	APPROVE BY
--	MAR,13,2014	---	A	New Document	5	陳鳳	林建良

REV.	DATE	PREPARED BY	CHECKED BY	APPROVED BY
A	MAR,13,2014	陳鳳	李海	林建良



SPECIFICATIONS

MODEL NO
OBO-B41SN-0B-012

PART NAME
ELECTRET CONDENSER MICROPHONE

SHEET
2 OF 5

Type: Omni directional Back Electret Condenser Microphone

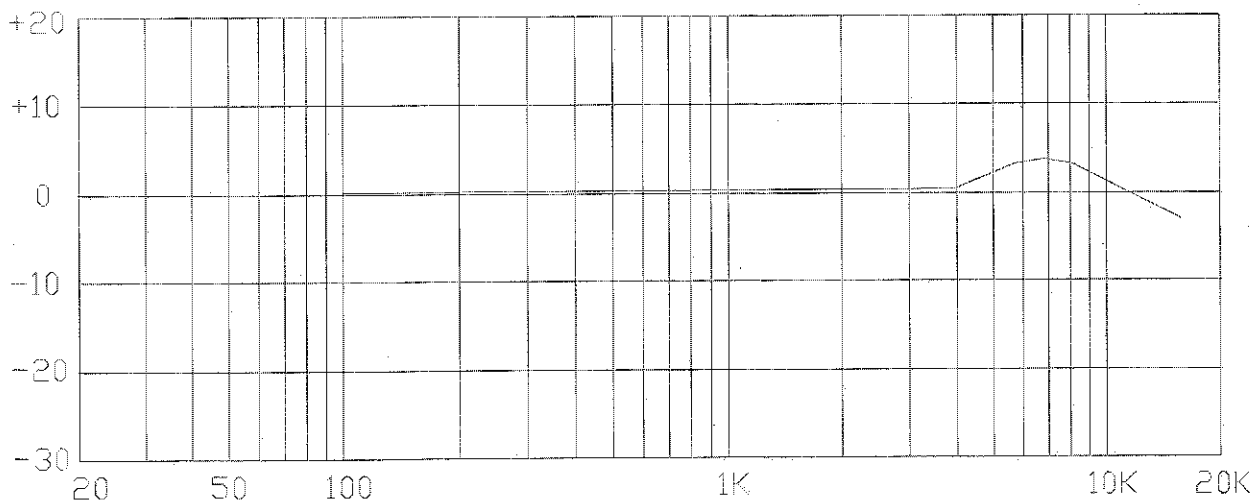
Model Number: OBO-B41SN-0B-012

1. Electrical Characteristics (Temperature =20±2°C Humidity=65±5%)

	Parameter	Symbol	Condition	Limits			Unit
				Min.	Center	Max.	
1.1	Sensitivity	S	0dB=1V/Pa , at 1kHz	-45	-42	-39	dB
1.2	Output impedance	Z out	f=1kHz			2.2	KΩ
1.3	Current Consumption	I _{DSS}	V _{CC} =2.0V,R _L =2.2K Ω			500	μA
1.4	Signal to Noise Ratio	S/N	at 1kHz S.P.L=1Pa (A-Weighted Curve)	60			dB
1.5	Decreasing Voltage	ΔS	V _{CC} =3.0V to 2.0V			-3	dB
1.6	Operating Voltage			1.0		10	V

2. Typical Frequency Response Curve

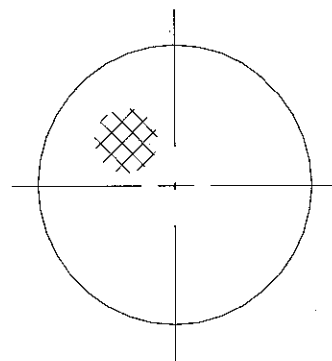
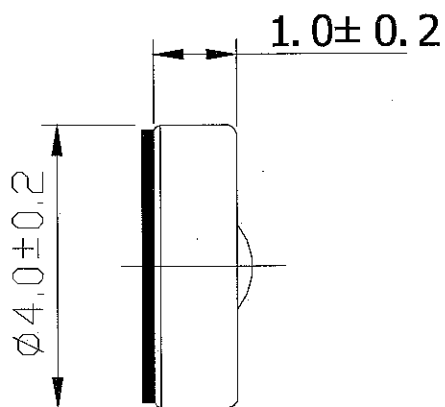
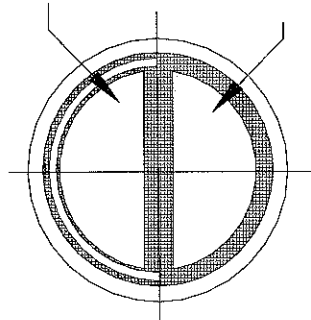
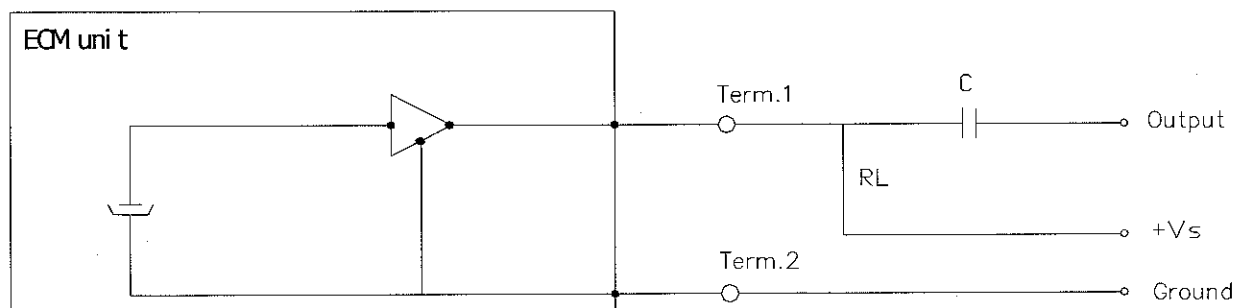
Frequency Response



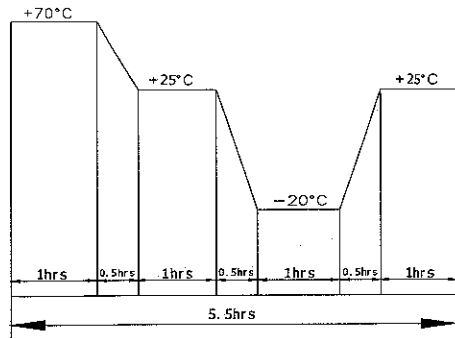
3. Appearance And Dimension

Unit : mm

Term.2 Term.1

**4. MEASUREMENT CIRCUIT:****5. TEMPERATURE CONDITION:**5.1 Operating Temperature Range: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$ 5.2 Storage Temperature Range: $-25^{\circ}\text{C} \sim +70^{\circ}\text{C}$

6. RELIABILITY TEST

NO.	item	Test condition	Evaluation standard
1	SVibration Test 振动测试	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 3 per-pendicular directions for 2 hours. 振动周波数 10~55HZ、全振幅 1.5mm 个于 X.Y.Z3 个方向,各 2 小时	After any tests, the sensitivity to be within $\pm 3\text{dB}$ of the initial sensitivity. 测试其灵敏度须与原测试值差异不超过 $\pm 3\text{dB}$.
2	Drop Test 落下试验	The microphone unit without packaged must be subjected to each 3 drops at three axes from the height of 1 meter to 20mm thick wooden board. 未包装麦克风单体从 1 公尺高处,X.Y.Z.3 个方向各 3 回,落于 20mm 厚木板上.	After any tests, the sensitivity to be within $\pm 3\text{dB}$ of the initial sensitivity. 测试其灵敏度须与原测试值差异不超过 $\pm 3\text{dB}$.
3	High temp.test 高温测试	After being placed in a chamber at $+70^{\circ}\text{C}$ for 72 hours. 置于 $+70^{\circ}\text{C}$ 环境中 72 小时	After any tests, the sensitivity to be within $\pm 3\text{dB}$ of initial sensitivity after 6 hours of conditioning at $+25^{\circ}\text{C}$ 经测试后麦克风,须静置于 $+25^{\circ}\text{C}$ (室温)环境中 6 小时后,测试其灵敏度须与原测试值差异不超过 $\pm 3\text{dB}$
4	Low temp. test 低温测试	After being placed in a chamber at -25°C for 72 hours. 置于 -25°C 环境中 72 小时	
5	Humidity test 相对湿度测试	After being placed in a chamber at $+60^{\circ}\text{C}$ and $90\pm 5\%$ relative humidity for 240 hours. 置于 $+60^{\circ}\text{C}$,相对湿度 $90\pm 5\%$ 环境中 240 小时.	
6	Temp.cycle test 测试回圈测试	The part shall be subjected to 10 cycles.One cycle shall be consist of: 单体承认温度回圈测试 10 次,其回圈内容如图示: 	

TEST CONDITION. (测试条件)

Standard Test Condition: a)Temperature: $+5\sim+35^{\circ}\text{C}$ b)Humidity:45-85% c)Pressure:860-1060mbar

一般测试条件: a)温度: $+5\sim+35^{\circ}\text{C}$ b)湿度:45-85% c)气压:860-1060mbar

Judgement Test Condition: a)Temperature: $+25\pm 5^{\circ}\text{C}$ b)Humidity:60-70% c)Pressure:860-1060mbar

标准测试条件: a)温度: $+25\pm 5^{\circ}\text{C}$ b)湿度: 60-70% c)气压:860-1060mba

7. Package

