OBO Pro.2	SPECIFICATIONS	MODEL NO OBO-04FP-0A-1F0
	PART NAME ELECTRET CONDENSER MICROPHONE	SHEET 1 OF 7

ALTERNATION HISTORY							
Marking	Date	ECN NO.	REV.	Description	Page	PREPARE BY	APPROVE BY
--	FEB,9,2018	DG1803001	E	Change PCB material	7	徐潇	林建宏

REV.	DATE	PREPARED BY	CHECKED BY	APPROVED BY
E	FEB,9,2018	徐潇	林建宏	林建宏

MODEL NO : OBO-04FP-0A-1F0

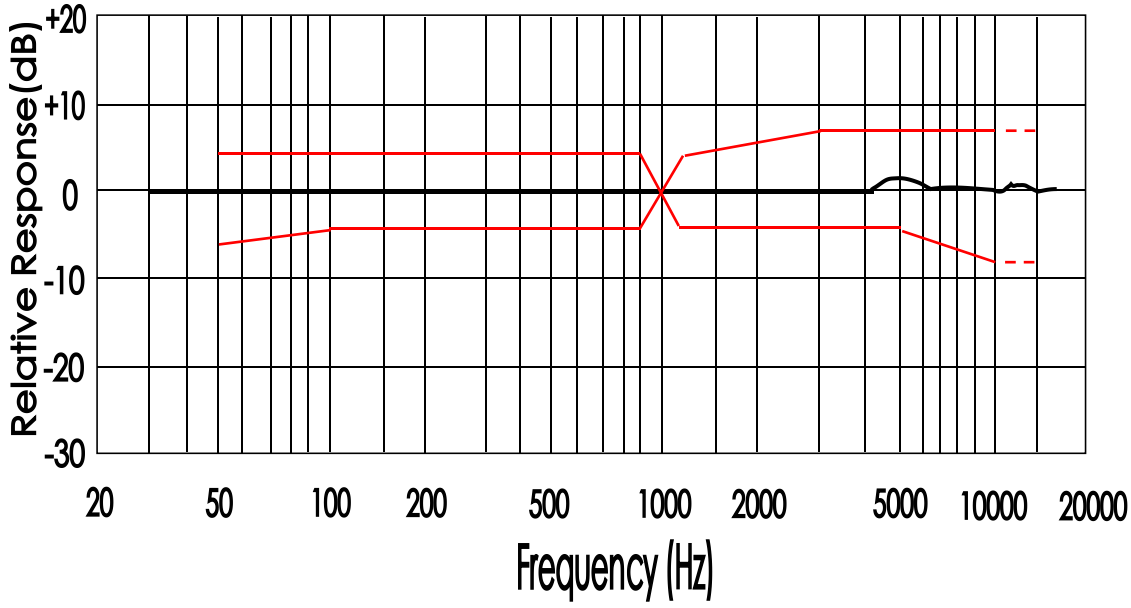
Features:Conformity RoHS Directive(2011/65/EU) Requests.

1. ELECTRICAL CHARACTERISTICS

Test Condition:(Vs=1.5 V,RL=1.5KΩ,Ta=20±2℃,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	-42	-40	-38	dB
1.2	Output Impedance	Zout	F=1KHz			1.5	KΩ
1.3	Current Consumption	IDss	VS=1.5V, L=1.5KΩ			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	△S-VS	VS=3.0V to 1.5V			-3	dB

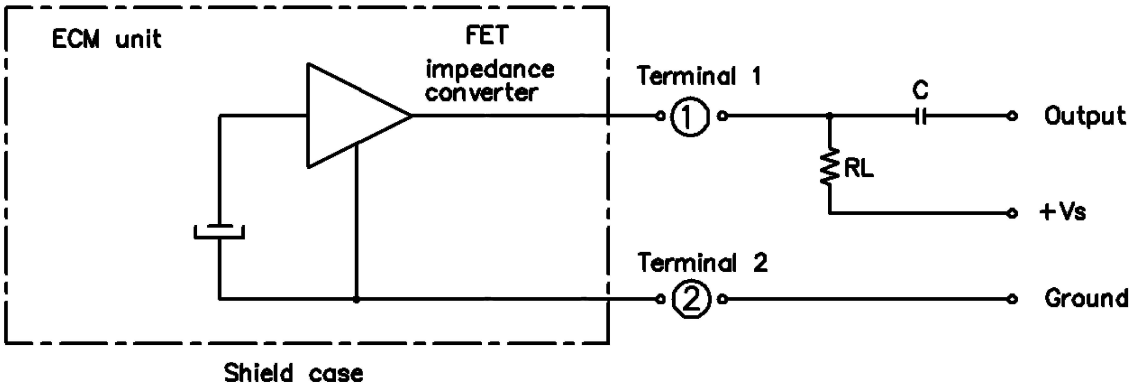
1.6 Typical Frequency Response Curve Limit



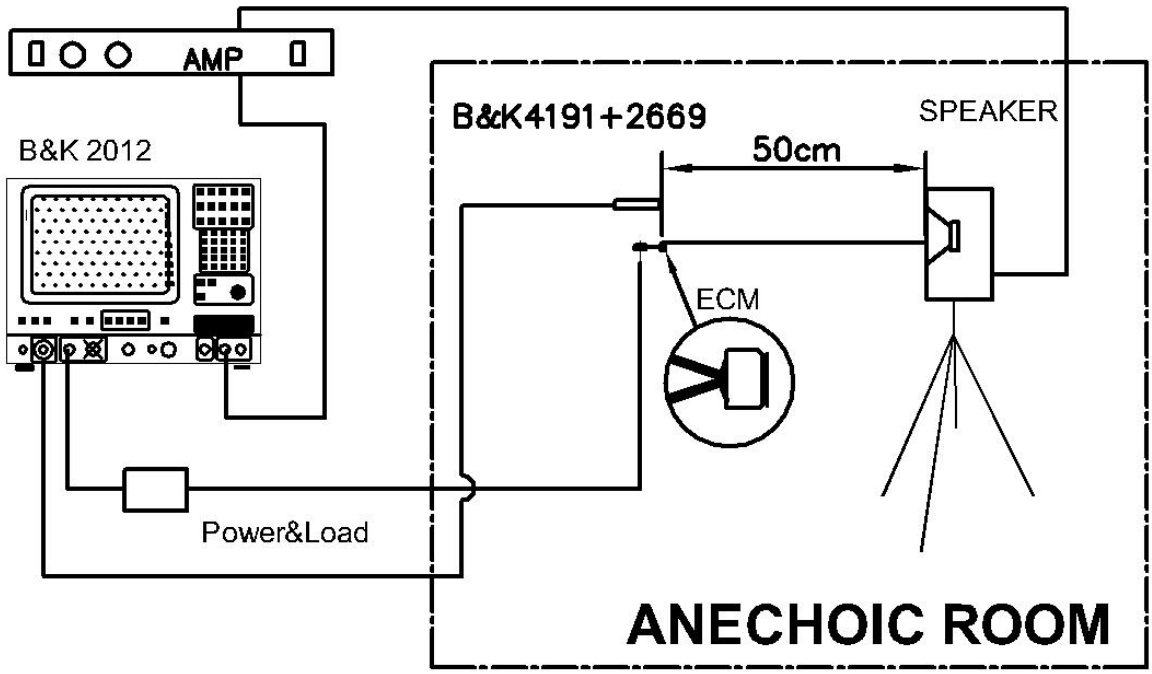
◎Frequency: 50~16,000Hz

◎Operatint Voltage: 1.1V to 10V

2.MEASUREMENT CIRCUIT



3.MEASUREMENT METHOD

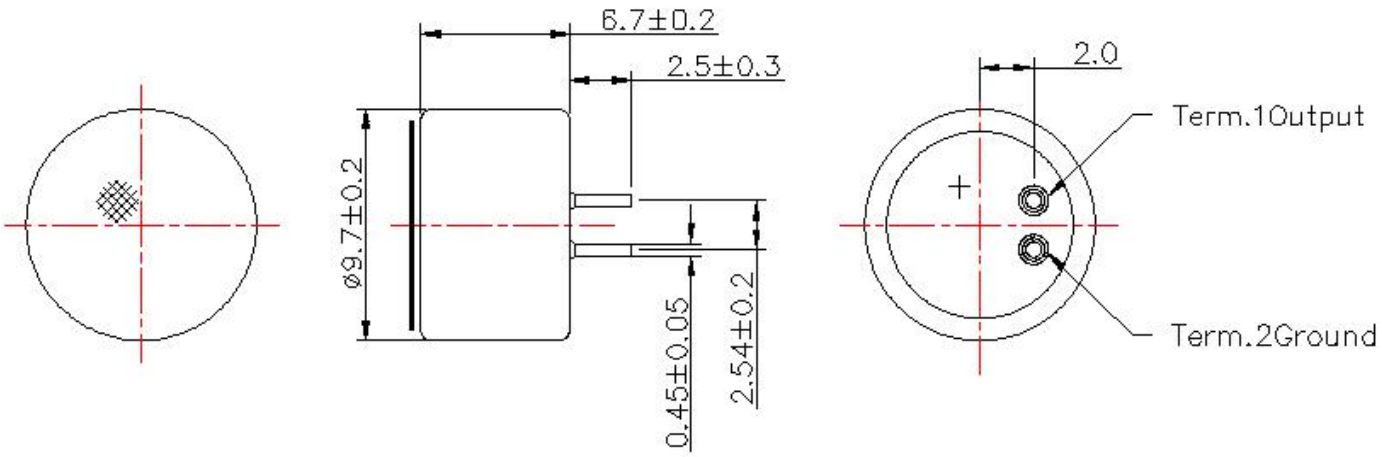


4.ASS'Y DRAWING

4.1 Soldering Standard : 320℃/ Max. 2 seconds

4.2 Mechanical Layout and Dimensions :

Unit:mm



5. TEMPERATURE CONDITIONS

5.1 Operating Temperature Range: -20℃～+70℃

5.2 Storage Temperature Range: -40℃～+75℃

6. RELIABILITY TEST

After each of following test, the sensitivity of the microphone should be within ±3dB of initial sensitivity after 3hours of conditioning at 20℃.

6.1. Vibration Test

Frequency : 10Hz~55Hz

Amplitude : 1.52mm

Change of Frequency : 1 octave/min

2 hours in each of axes

6.2. High Temperature Test

+70℃ for 240 hours.

6.3. Low Temperature Test

-20℃ for 240 hours.

6.4. Humidity Test

90%～95%RH,+60℃ for 240 hours.

6.5. Thermal shocking test

–20°C, 30 minutes ↔ +70°C, 30 minutes, repeated 32 cycles → room temperature, 3 hours.

6.6.Temperature Cycles

-20℃ +20℃ +70℃ +20℃ -20℃

(2h) (0.5h) (2h) (0.1h) (2h) (0.5h) (2h) (0.5h) (2h) for 5 cycles.

6.7. Packing Drop Test

Height：1.5m

Procedure: 5 times from each of axes

6.8. Electrostatic discharge

Tested to IEC61000-4-2 level 3：

a) Contact discharge

The microphone shall operate normally after 10 discharges to is 6KV DC and the discharge network is 150pF and 330Ω.

b) Air discharge

The microphone shall operate normally after 10 discharges to is 8KV DC and the discharge network is 150pF and 330Ω

7. Soldering Condition

1. We suggest using anti-static welding machine which can control soldering temperature automatically.

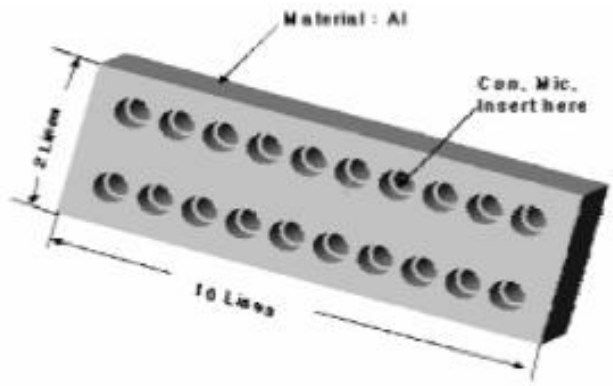
2. Soldering temperature should be controlled under 320℃ and soldering time for each terminal should be 1~2 sec..

3. Microphone should be fixed on the metal block (heat sink), which has high radiation effects, and heat sink shall contact with MIC tightly.

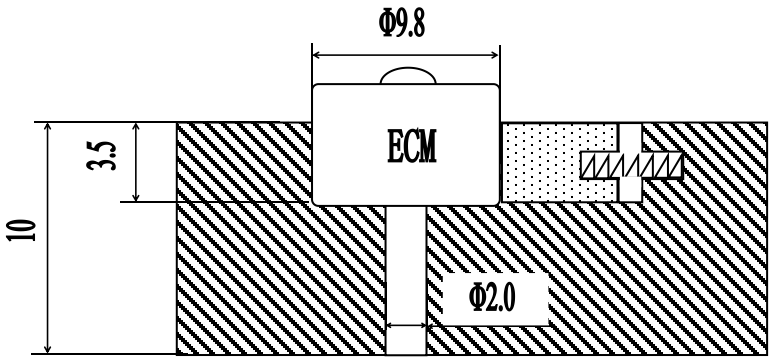
4. Microphone may easily be destroyed by the static electricity and the countermeasure for eliminating the static electricity shall be executed (worktable and human body shall be ground connection).

8.Heat Sink

Shape of heat sink



Shape of hole at fixed part



9. PACKAGING

1. MODEL NUMBER ：

OBO-04FP-0A-1F0

2. DIMENSION:(LENGTH*WIDTH *HEIGHT)

a) CASING SPONGE
100mm*100mm*10mm

b) SMALL PACKET
100mm*100mm*17mm

c) PLASTIC BAG:
200mm*300mm*50mm

d) PAPER CASE:
500mm*300mm*285mm

3.EQUIPMENT

a)ADHENSIVE TAPE MACHINE

b)AUTO PACKER

4.PACKING INTRODUCTION

a)100PCS/ SMALL PACKET

b)600PCS/MID PACKET

c)12000PCS/PAPER CASE

5.QUANTITY INTRODUCTION

a)1PC=0.7g

b)NET WEIGHT：8.4kg
GROSS WEIGHT：12.1kg

6.LABEL STIPULATION

a) LABELEDEVERY BOXES
(SEE THE CHART)

b) DIMENSIONSSHOULDBESEEN EASILY.

Packing chart

X1

100PCS

X6

600PCS

X20

12000PCS