

# *MESSRS.*

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## SPECIFICATION FOR APPROVAL

## 承 認 書

Product	ELECTRET CONDENSER MICROPHONE
Part No.	AMF-O97L38-NB3
Customer Approval	

Approved By	Checked By	Made By
		工程 部 許俊程 JAN-13



**ADVANCED ACOUSTIC TECHNOLOGY CORP.**

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# SPECIFICATIONS

01	Electret Type	Foil type
02	Sensitivity	-38±3dB (0dB=1V/Pa,1KHz)
03	Output Impedance (Max)	2.2KΩ
04	Directivity	Omnidirectional
05	Frequency Range	70-20,000Hz
06	Max.Operation Voltage	10V
07	Standard Operation Voltage	2.0V
08	Current Consumption	Max.0.5mA
09	Sensitivity Reduction	Within -3dB 0dB=1V/Pa,1KHz Vs=2.0 to 1.5V
10	S/N Ratio	> 60dB
11	Operating Temperature	-25~+70°C
12	Storage Temperature	-40~+70°C

## Standard Conditions:

Generally Temperature 15~35°C

Generally Humidity 45~85%

Generally Atmospheric Pressure 860~1060hpa

## Basic Test Conditions:

Temperature 20±2°C

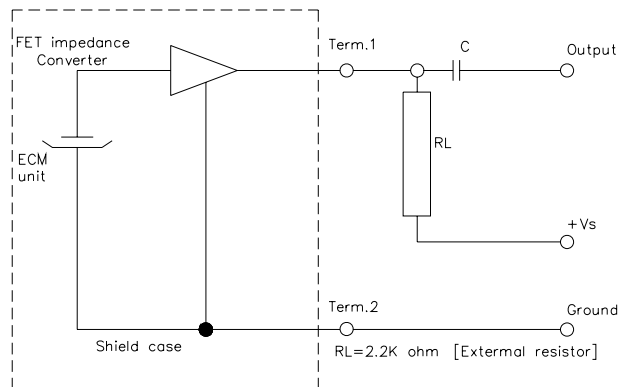
Humidity 60~70%

Generally Atmospheric Pressure 860~1060hpa

## Electrical Characteristics Test Condition:

Vs=2.0V RL=2.2KΩ Te=20°C R.H.=60%

## Standard Test Circuit



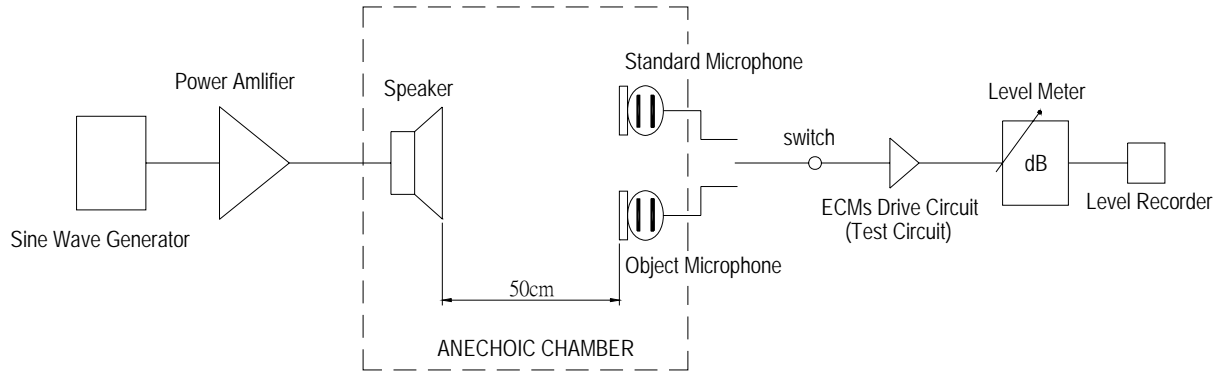
## Every Mic. has installed FET.,

The FET. is easy broken by strong heat and static electricity, so when you working on, pls be attention that :

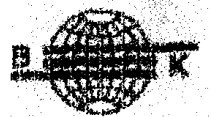
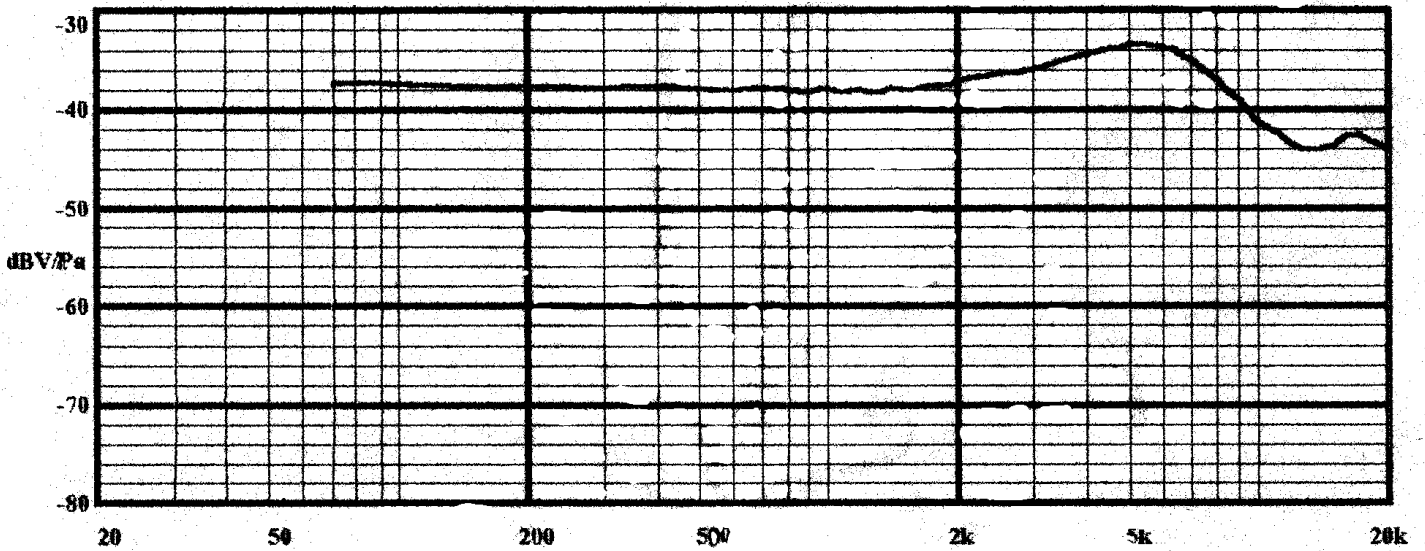
- Recommend using constant branding iron in 15 ~ 30W, and in temperature range 240 ~ 270°C.
- Soldering time not over 3 seconds.
- Don't stay any hole or dust when soldering.
- To avoid the Mic. be broken by static electricity, the people and working station should install prevent static electricity equipment.

# Standard Test Condition Of Microphone

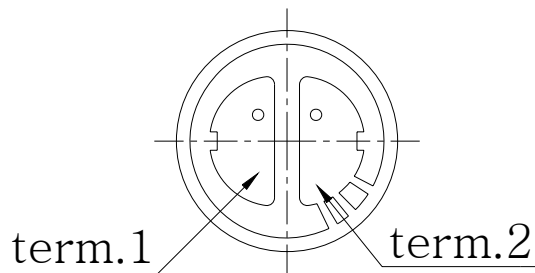
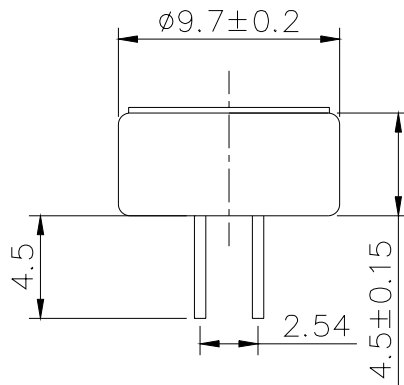
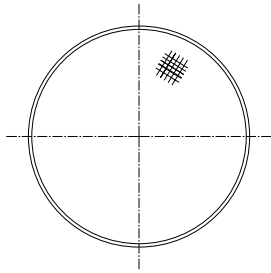
## MEASUREMENT OF SENSITIVITY



## Frequency Response Curve



REV NO.	REVISION NOTE	APPROVAL	DATE
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TITLE: <i>MICROPHONE</i>		DRAWN: <i>JCHEN</i> 01/13/2003	SCALE: 3:1	SHEET: 1 : 1
PART NO. <i>AMF-097L38-NB3</i>	1 REV	DESIGNED: <i>R &amp; D OF AAT</i>	UNITS: <i>mm</i>	
DWG NO. <i>DTM-1279</i>		CHECKED:	TOLERANCE $\pm 0.2$	
		APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL $\pm$ *** TWO PLACE DECIMAL $\pm$ *** THREE PLACE DECIMAL $\pm$ ***	
		MATERIAL: <i>*****</i>		



**苙翔科技股份有限公司**  
 ADVANCED ACOUSTIC TECHNOLOGY CORPORATION

# ADVANCED ACOUSTIC TECHNOLOGY CORP.

## 苙翔科技股份有限公司

### RELIABILITY TEST

#### AMF-O97L38-NB3

Item	Test Conditions	Evaluation Standard
01 High Temp. Test	After exposure at 70°C for 100 hours, and expose to room temperature for 6 hours, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity.	After any tests , the sensitivity to be within $\pm 3\text{dB}$ of initial sensitivity after 3 hours of conditioning at 20°C and shall keep their initial operation and appearance.
02 Low Temp. Test	After exposure at -25°C for 100 hours, and expose to room temperature for 6 hours, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity.	
03 Temp.Cycle Test	After exposure at 70°C for 1 hour, at room temp. for 1 hour, at -25°C for 1 hour, at room temp. for 1 hour, at 10 cycles, and expose to room temp. for 6 hours, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity.	
04 Humidity Test	After exposure at 40°C and 90 $\pm$ 5% relative humidity for 240 hours, and expose to room temperature for 6 hours, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity.	
05 Vibration Test	The microphone unit must be subjected to each 30 minutes vibrations at three axes 3 mm dynamic rang. 1000cycles/minute.	
06 Drop test	The microphone unit without packaged must be subjected to each 3 drops at three axes from the height of 1 meter to 20mm thick hardwood.	
07 Pull Strength Test	The microphone assembly shall suffer no change from a pull strength of 0.5 kg for 3 seconds applied between the connector and the microphone.	Application of the "pin" type