




MESSRS.

SPECIFICATION FOR APPROVAL

Product	ELECTRET CONDENSER MICROPHONE
Part No.	AMF-O97A43-1NB1
Customer Approval	
Customer Part No.	

Approved By	Checked By	Made By
		



Advanced Acoustic Technology Corporation



ISO 9001 Certified

ISO 14001 Certified

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RoHS

[illegible]

1. SPECIFICATIONS

AMF-O97A43-1NB1

01	Sensitivity	-43±3dB (0dB=1V/Pa,1KHz)
02	Standard Operation Voltage	3.0 V
03	Output Impedance	2.2 KΩ
04	Directivity	Omni directional
05	Frequency Range	100 - 10K Hz
06	Max. Operation Voltage	10V
07	Current Consumption	Max.0.5mA
08	Sensitivity Reduction	Within -3dB 0dB=1V/Pa,1KHz Vs=2.0 reduce to 1.5V
09	S/N Ratio	≥60dB
10	Sound Pressure Level	110 dB
11	Operating Temperature	-20~+60℃
12	Storage Temperature	-25~+70℃

※ For noise-cancelling use, please refer to unidirectional or bidirectional types.

2. MEASURING METHOD

2-1. Test Condition

Standard Conditions:

Generally Temperature 15~35℃

Generally Humidity 45~85%

Generally Atmospheric Pressure 860~1060hpa

Basic Test Conditions:

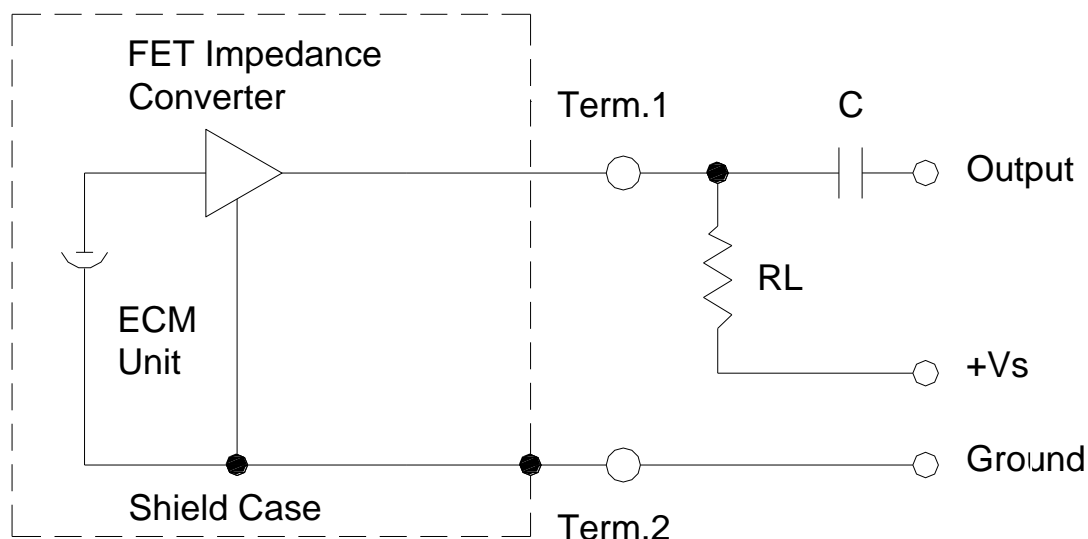
Temperature 20±2℃

Humidity 60~70%

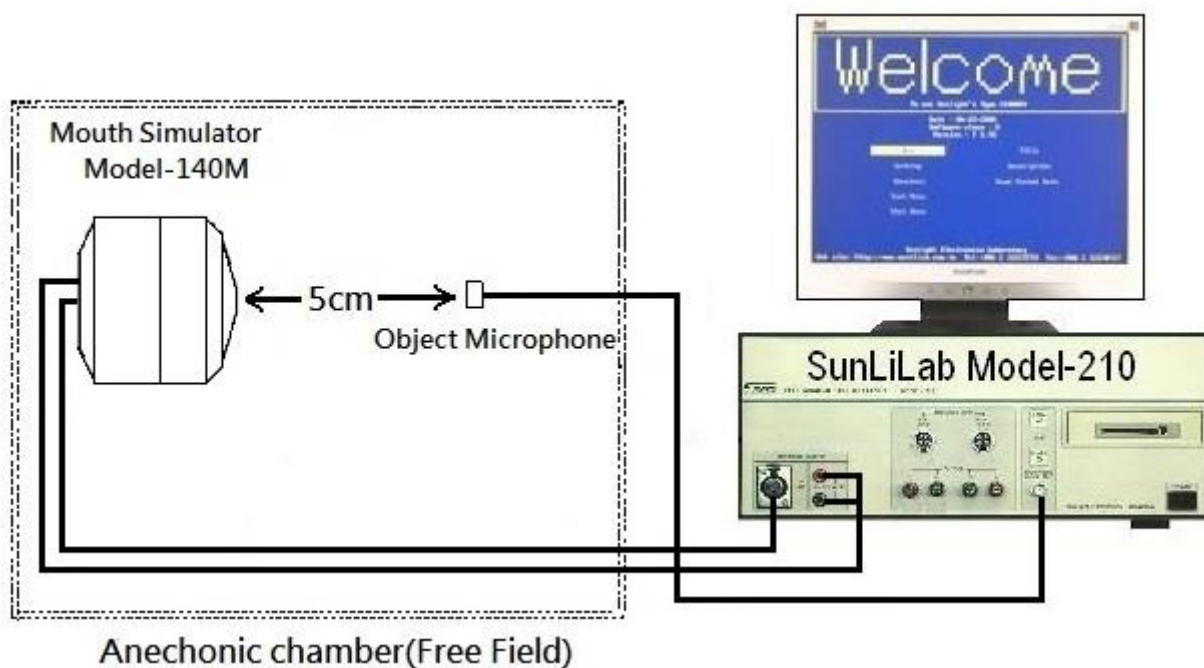
Generally Atmospheric Pressure 860~1060hpa

2-2. Standard Test Circuit

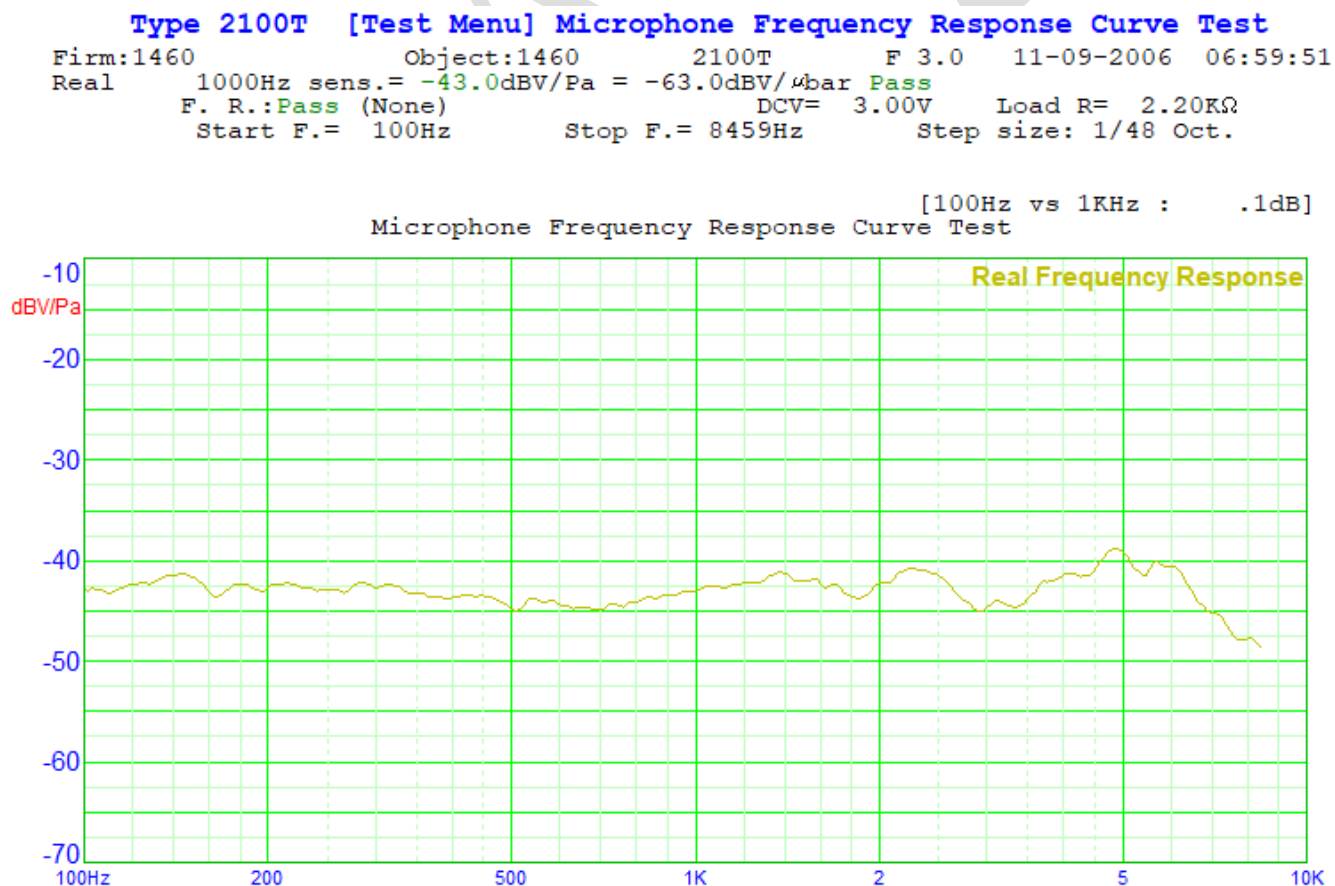
Vs=3.0V RL=2.2KΩ Te=20℃ R.H.=60%



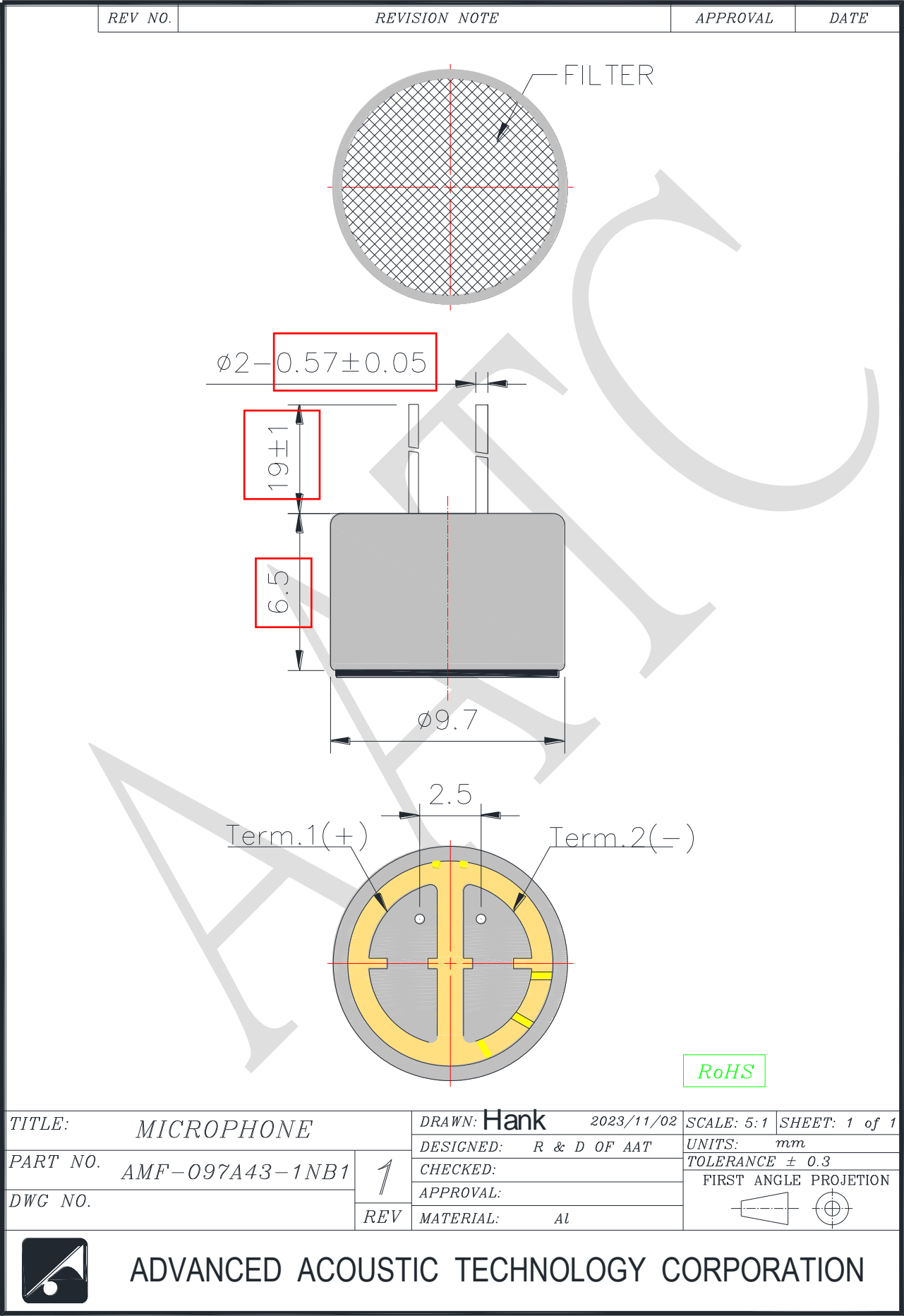
2-3. Standard Test Fixture



2-4. Frequency Response Curve



3. DIMENSIONS



4. RELIABILITY TEST

Item		Test Conditions	Evaluation Standard
01	High Temp. Test	After exposure at +70℃ for 96 hours	After any tests , the sensitivity to be within ±3dB of initial sensitivity after 3 hours of conditioning at 20℃ and shall keep their initial operation and appearance.
02	Low Temp. Test	After exposure at -25℃ for 96 hours	
03	Temp. Cycle Test	A After exposure at +70℃ for 30 minutes, at room temp. for 10 minutes, at -25℃ for 30 minutes, at room temp. for 10 minutes, at 5 cycles.	
04	Humidity Test	After exposure at 40℃ and 90±5% relative humidity for 96 hour.	
05	Vibration Test	10~50Hz for 1 minute full amplitude 1.52mm for 2 hours at three axis.	
06	Drop test	The microphone unit without packaged must be subjected to each 3 drops at three axis from the height of 1 meter to 20mm thick hardwood.	
Criterion : 1. AATC reserves the right to change product material without prior notice, guaranteeing the same specification. Materials are subject to change due to environmental regulations, sourcing, and process improvements. 2. If you need more information, please contact our technology department, thank you.			

5. SOLDERING CONDITION

Every microphone 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 searing-iron in temperature range **$330\pm 5^{\circ}\text{C}$** .
- Soldering time **2** seconds.
- Don't stay any hole or dust when soldering.
- To avoid the microphone be broken by static electricity, the people and working station should install prevent static electricity equipment.

6. PACKING

