
SPECIFICATION FOR APPROVAL

Product	ELECTRET CONDENSER MICROPHONE
Part No.	AM-N60K47-NT
Customer Approval	

Approved By	Checked By	Made By



A & B Components

<http://www.speaker-tw.com>

SPECIFICATIONS

01	Electret Type	Foil type
02	Sensitivity	-47±3dB (0dB=1V/Pa,1KHz)
03	Output Impedance (Max)	2.2KΩ
04	Directivity	Noise Cancelling
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	> 58dB
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

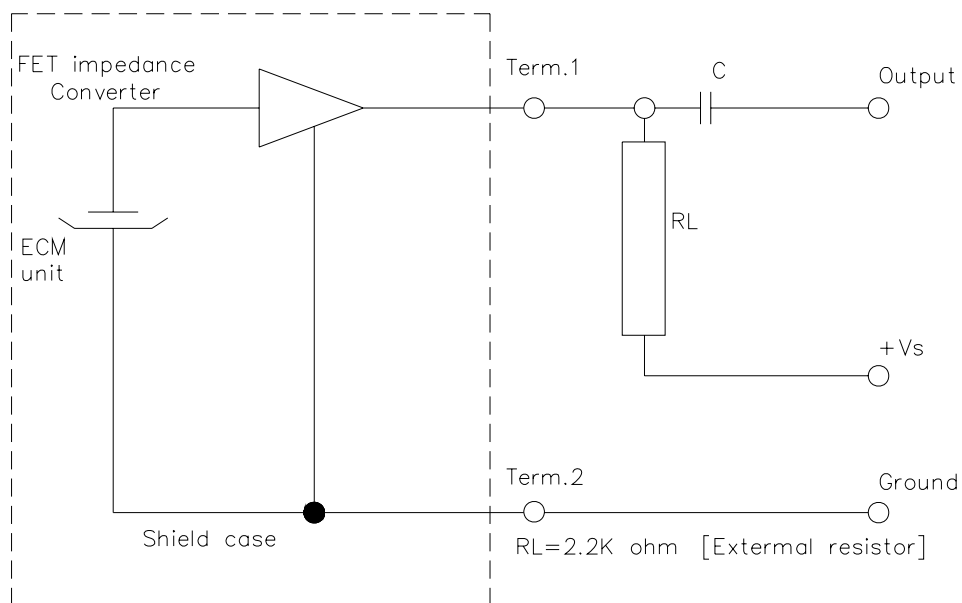
Humidity 60~70%

Generally Atmospheric Pressure 860~1060hpa

Electrical Characteristics Test Condition:

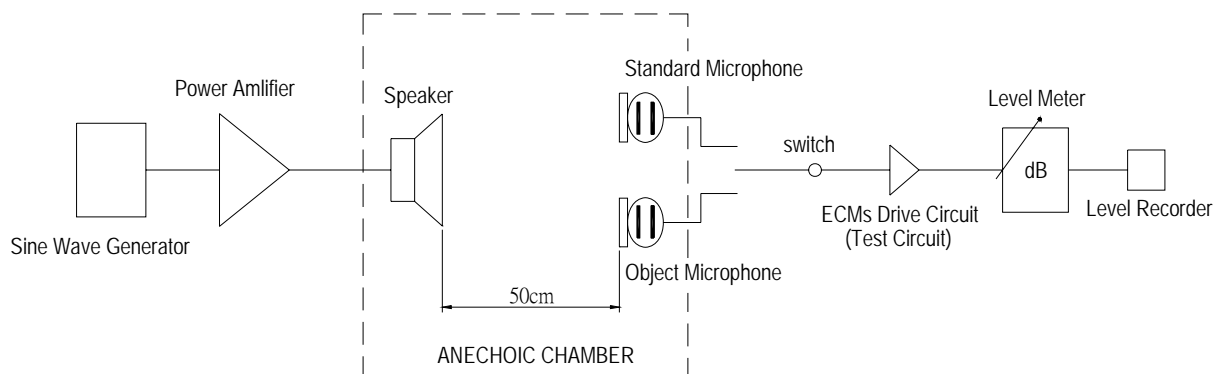
Vs=2.0V RL=2.2KΩ Te=20°C R.H.=60%

Standard Test Circuit

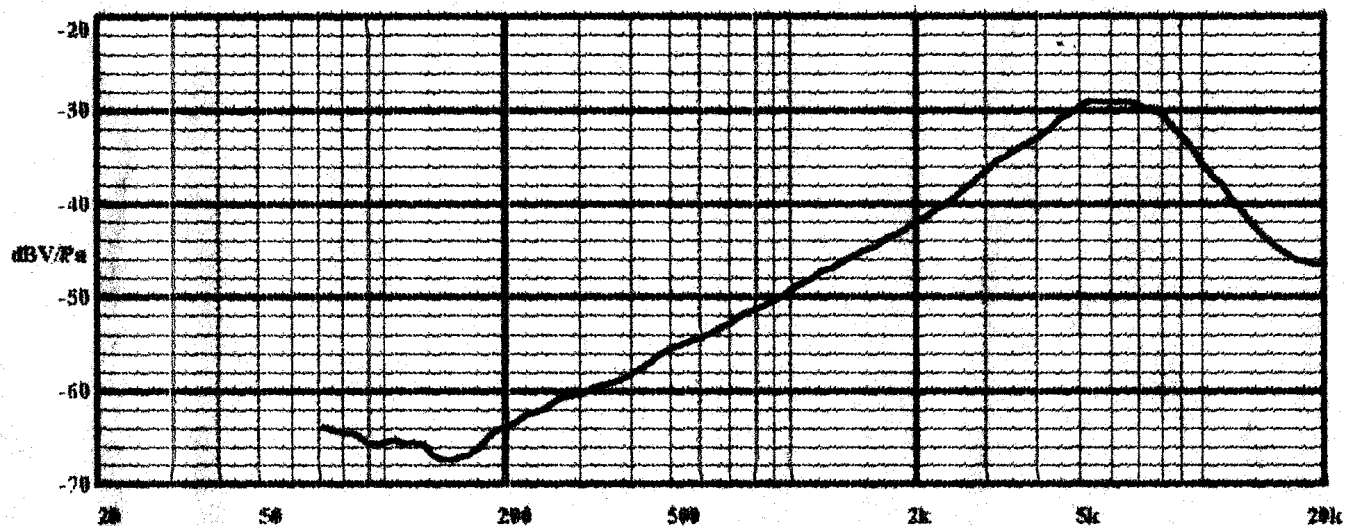


Standard Test Condition Of Microphone

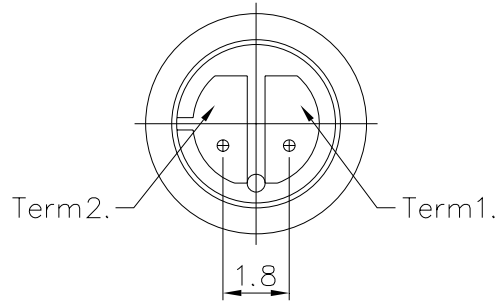
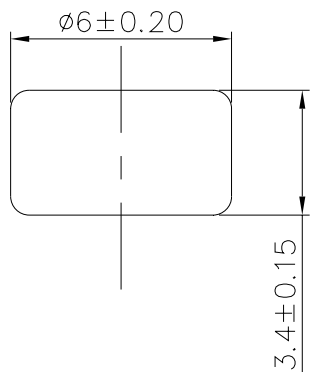
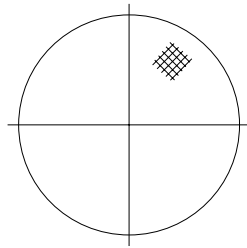
MEASUREMENT OF SENSITIVITY



Frequency Response Curve



REV NO.	REVISION NOTE	APPROVAL	DATE
---------	---------------	----------	------



TITLE: <i>MICROPHONE</i>		DRAWN: <i>Richard</i> 05/14/2001	SCALE: 5/1	SHEET: 1 : 1
PART NO. <i>AM-N60K47-NT</i>	1	DESIGNED: <i>R & D DEP.</i>	UNITS: <i>mm</i>	
DWG NO. <i>DTM-1067</i>		CHECKED:	TOLERANCE ± 0.2	
	REV	APPROVAL:	UNLESS OTHERWISE SPECIFIED:	
		MATERIAL: <i>*****</i>	ONE PLACE DECIMAL ± ***	
			TWO PLACE DECIMAL ± ***	
			THREE PLACE DECIMAL ± ***	

A & B Components

RELIABILITY TEST

AM-N60K47-NT

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.
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 axis 3 mm dynamic rang. 1000cycles/minute.
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.
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.
<p>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.</p> <p>Application of the "pin" type</p>		