## SPECIFICATION FOR APPROVAL

Product	ELECTRET CONDENSER MICROPHONE
Part No.	AM-O60G42-NT
Customer	
Approval	

Approved By	Checked By	Made By		



A & B Components

http://www.speaker-tw.com

SPECIFICATIONS				
01 Electret Type	Back type			
02 Sensitivity	-42±3dB (0dB=1V/Pa,1KHz)			
03 Output Impedance (Max)	2.2K Ω			
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	> 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

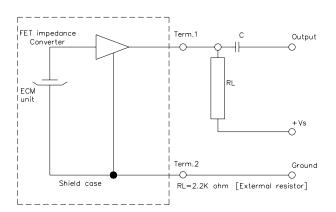
Humidity 60~70%

Generally Atmospheric Pressure 860~1060hpa

### **Electrical Characteristics Test Condition:**

Vs=2.0V RL=2.2K  $\Omega$  Te=20 $^{\circ}$ C R.H.=60 $^{\circ}$ 

### **Standard Test Circuit**



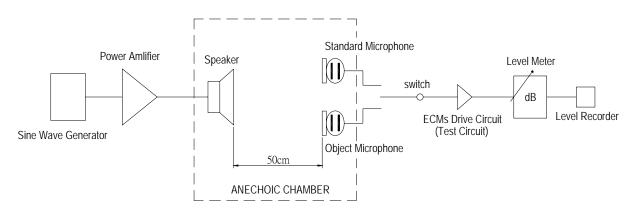
### Every Mic. has installed FET.,

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

- a. Recommend using constant branding iron in 15 ~ 30W, and in temperature range 240 ~ 270°C.
- b. Soldering time not over 3 seconds.
- c. Don't stay any hole or dust when soldering.
- d. 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**

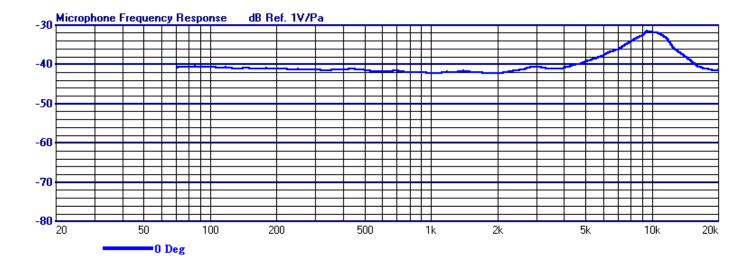
### MEASUREMENT OF SENSITIVITY



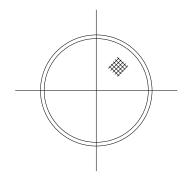
### Frequency Response Curve

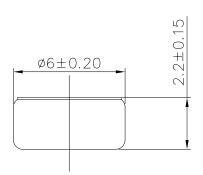
X:1000 Hz Y:-42.1 dBY/Pa

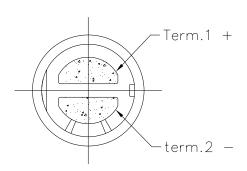
Y:-39.9 dBm/Pa D:0.0 dB











TITLE: MICROPHONE		DRAWN:	Richard	11/25/2003	SCALE: 5/1	SHEET: 1	: 1
1.11 011 01 11 01 12		DESIGNED.	R & D	DEP.	011116.	mm	
$^{PART\ NO.}AM\!-\!060G42\!-\!NT$	1	CHECKED:			TOLERANCE UNLESS OTH		'CIFIED:
DWC NO		APPROVAL:			ONE PLACE	$DECIMAL \pm$	***
DMC NO. $DTM-1295$	REV	MATERIAL:	****	*	TWO PLACE THREE PLACE	<i>DECIMAL ±</i> CE DECIMAL	

A & B Components

# **RELIABILITY TEST**

## AM-O60G42-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 ±3dB 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 ±3dB from initial sensitivity.		
03	Temp.Cycle Test	After exposure at $70^{\circ}$ C for 1 hour, at room temp. for 1 hour, at $-25^{\circ}$ 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 $\pm 3$ dB from initial sensitivity.	After any tests, the sensitivity to be within ±3dB of initial sensitivity after 3 hours of	
04	Humidity Test	After exposure at 40°C and 90±5% relative humidity for 240 hours, and expose to room temperature for 6 hours, sensitivity to be within ±3dB from initial sensitivity.	keep ineir iniliai operalion and lannearance	
05	Vibration Test	The microphone unit must be subjected to each 30 minutes vibrations at three axises 3 mm dynamic rang. 1000cycles/minute.		
06	Drop test	The microphone unit without packaged must be subjected to each 3 drops at three axises 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.	Annlication of the "nin" type	