SPECIFICATION FOR APPROVAL

Product	ELECTRET CONDENSER MICROPHONE
Part No.	AM-O40J46-NW5
Customer Approval	

Approved By	Checked By	Made By

A & B Components

http://www.speaker-tw.com

1. SPECIFICATIONS

AM-O40J46-NW5

01	Electret Type	BACK type
02	Sensitivity	-46±3dB (0dB=1V/Pa,1KHz)
03	Standard Operation Voltage	2.0V
04	Output Impedance (Max)	2.2KΩ
05	Directivity	Omnidirectional
06	Frequency Range	70 - 20K Hz
07	Max. Operation Voltage	10V
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	-20~+60℃
12	Storage Temperature	-30~+70℃

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:

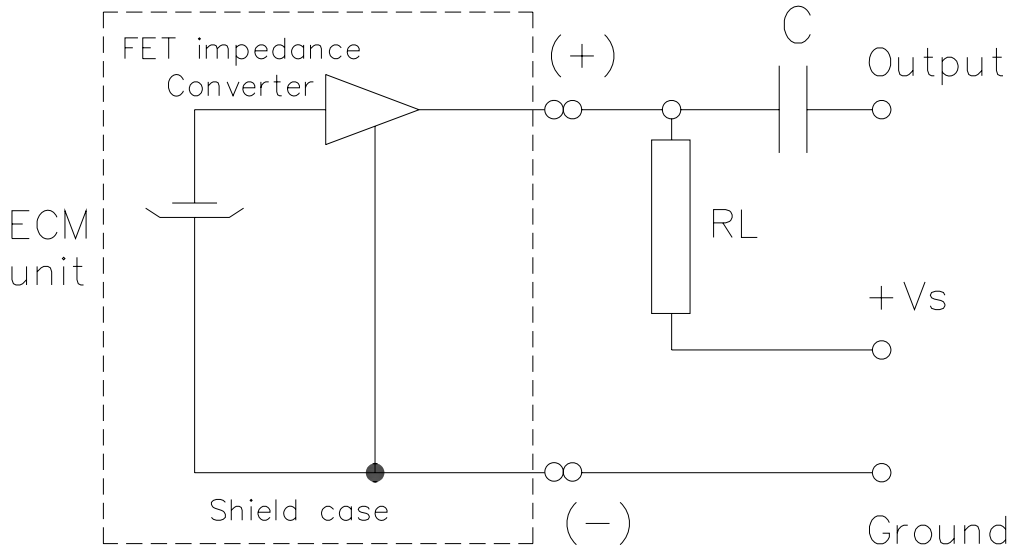
Temperature 20±2℃

Humidity 60~70%

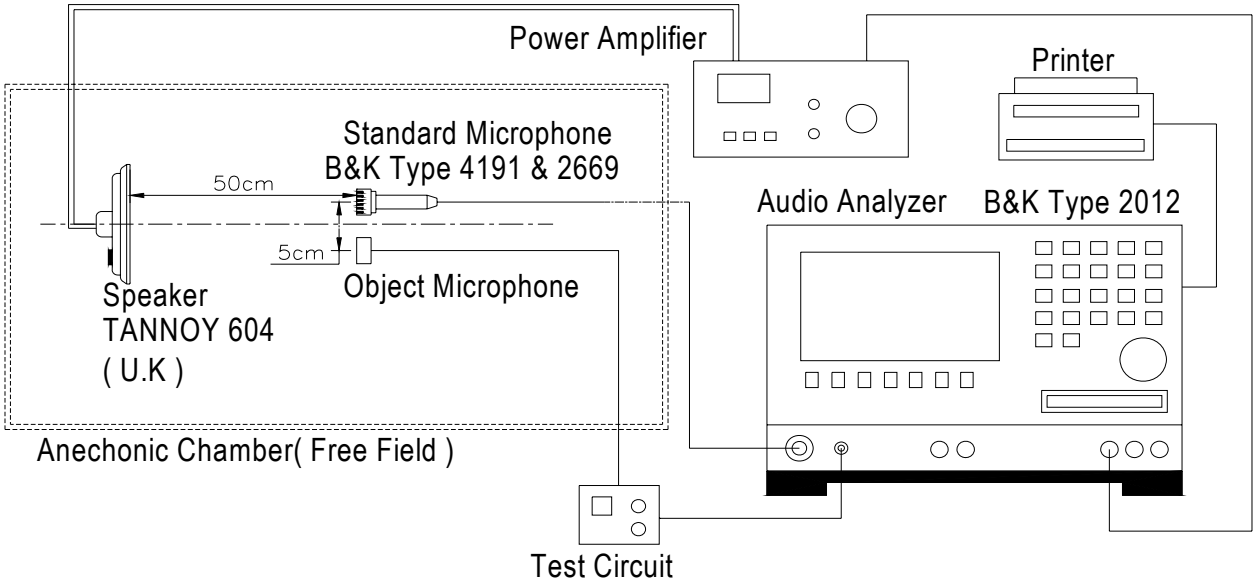
Generally Atmospheric Pressure 860~1060hpa

2-2. Standard Test Circuit

Vs=2.0V RL=2.2KΩ Te=20℃ R.H.=60%

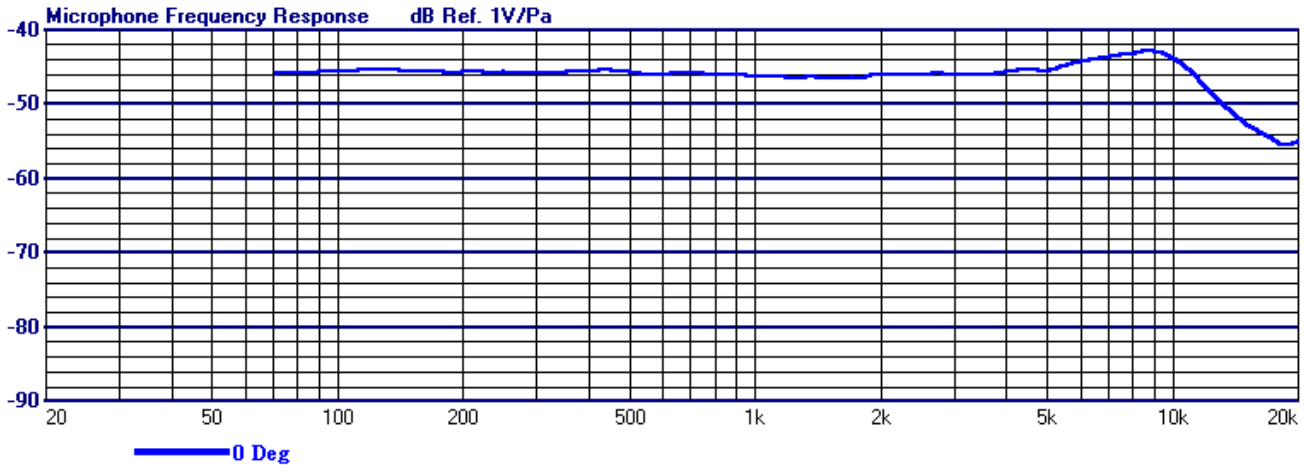


2-3. Standard Test Fixture

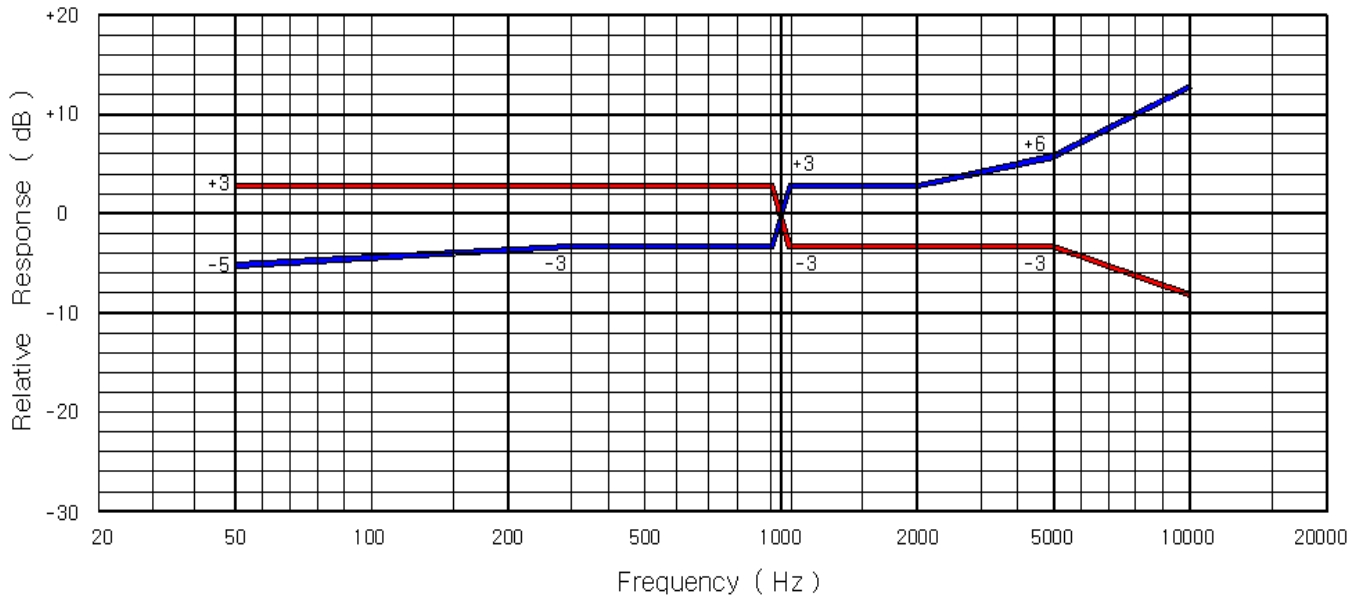


2-4. Frequency Response Curve

X : 1000 Hz Y : -46.3 dBV/Pa
Y : -44.0 dBm/Pa
D : 0.0 dB



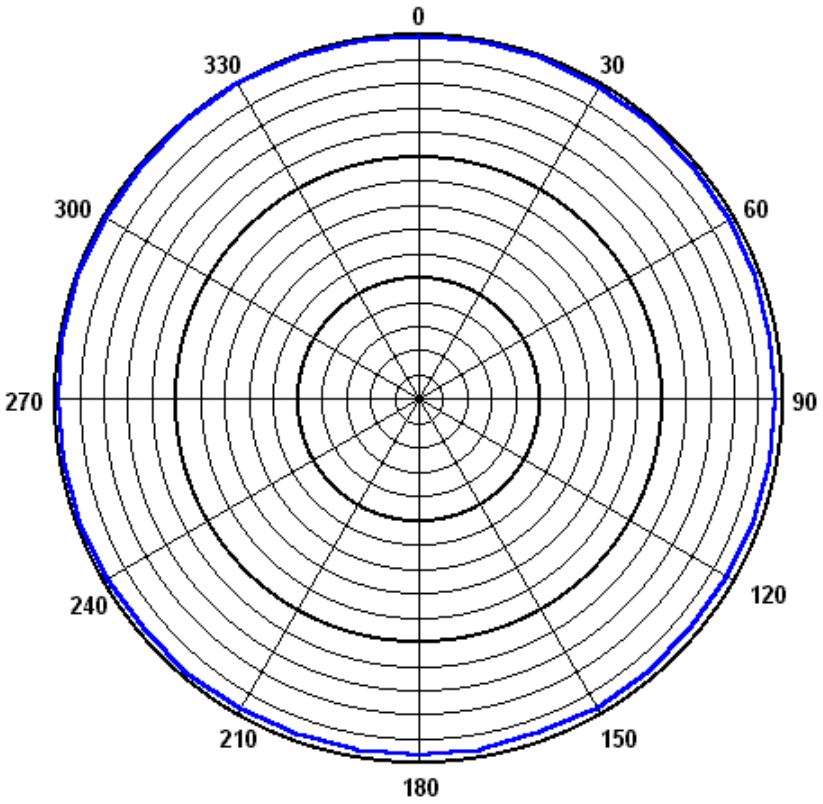
2-5. Frequency Response Curve LIMIT MASK



2-6. Omnidirectional Characteristic

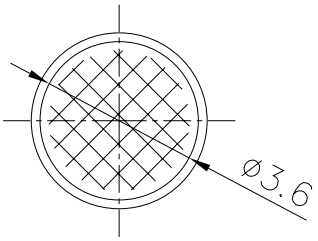
RANGE : 30dB

Frequency : 1000 Hz.

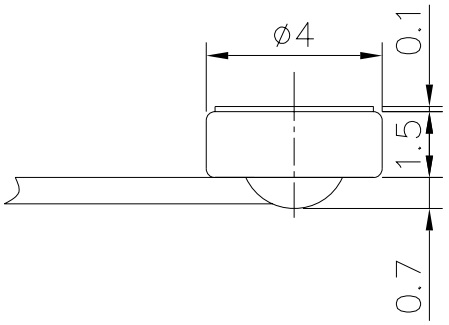


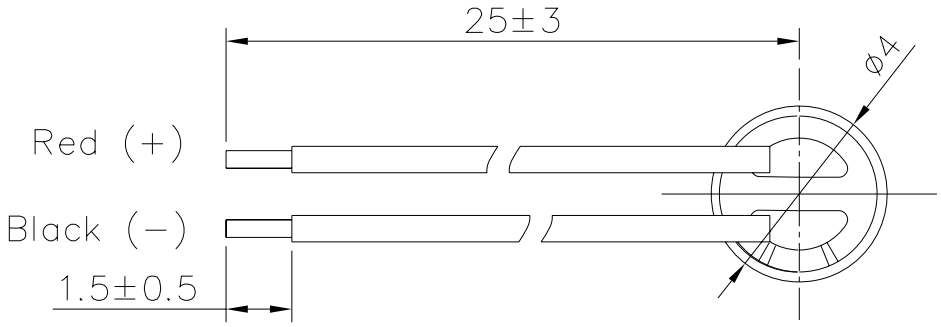
Measure Distance : 50 cm
Test Instrument : Bruel & Kjaer 2012 & 9640

REV NO.	REVISION NOTE	APPROVAL	DATE



MIC. : ø4 * 1.5 mm .
WIRE : UL 1571 , 32AWG .





TITLE: MICROPHONE		DRAWN: Richard 03/27/2008	SCALE: 5:1	SHEET: 1 of 1
PART NO. AM−040J46−NW5	1	DESIGNED: R & D DEP.	UNITS: mm	
		CHECKED:	TOLERANCE ± 0.2	
DWG NO. DTM−1356	REV	APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL ± *** TWO PLACE DECIMAL ± *** THREE PLACE DECIMAL ± ***	
		MATERIAL: *****		

A & B Components

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 -30℃ for 96 hours	
03	Temp. Cycle Test	A After exposure at 70℃ for 30 minutes, at room temp. for 10 minutes, at -30℃ for 30 minutes, at room temp. for 10 moniutes, 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 horous at three axises ..	
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.	

5. SOLDERING CONDITION

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 30W, and in temperature range 300±10°C.
b. Soldering time 2 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.