
SPECIFICATION FOR APPROVAL

Product	ELECTRET CONDENSER MICROPHONE
Part No.	AM-O40J46-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	-46±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 1.5 V
10	S/N Ratio	> 56dB
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

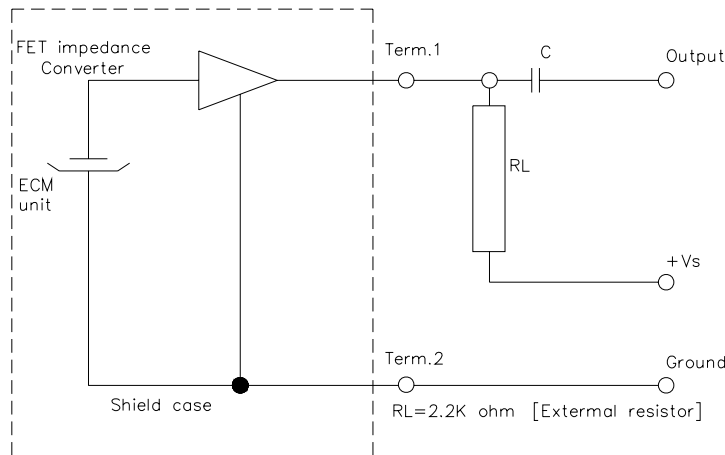
Humidity 60~70%

Generally Atmospheric Pressure 860~1060hpa

Electrical Characteristics Test Condition:

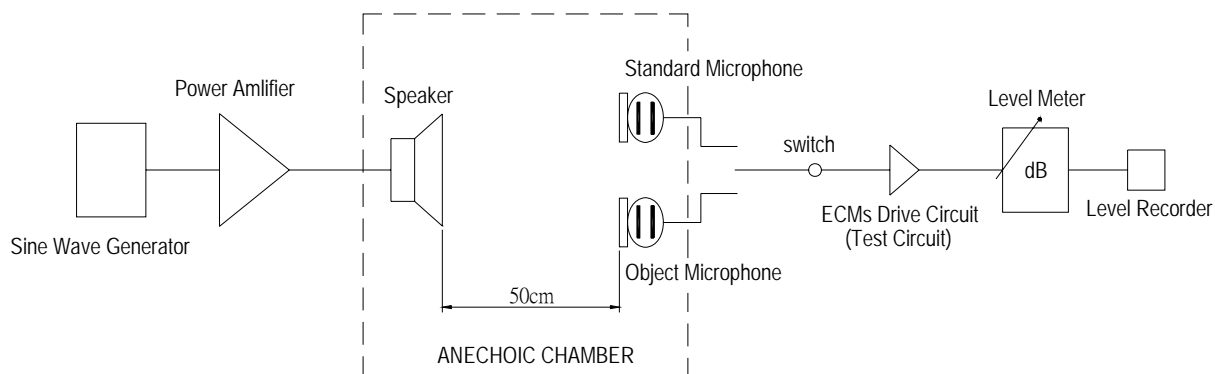
Vs=2.0 V RL=2.2 KΩ Te=20°C R.H.=60%

Standard Test Circuit



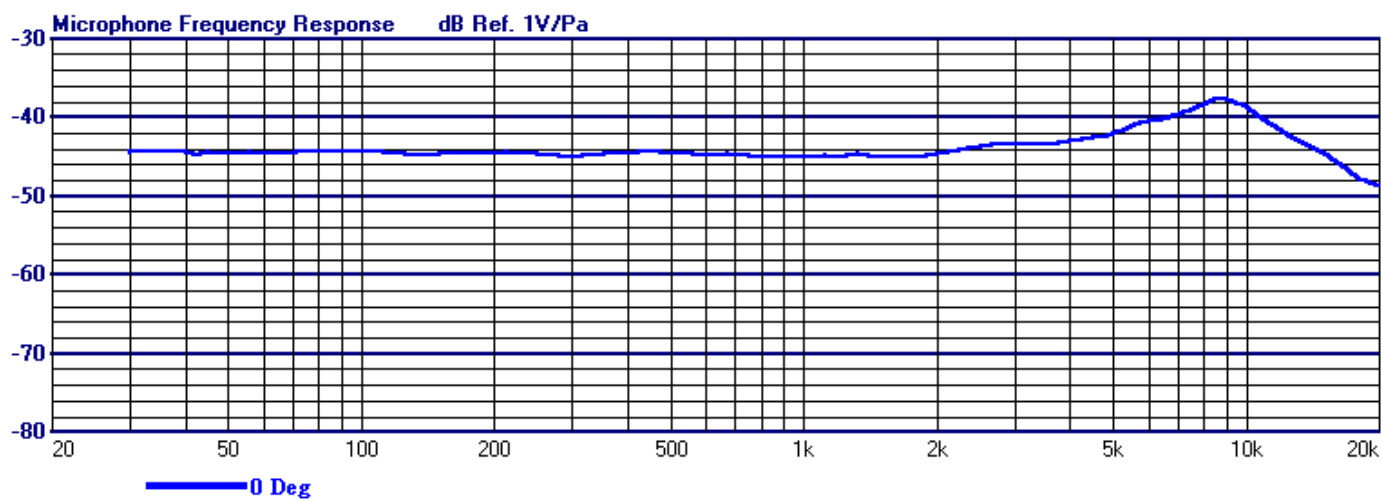
Standard Test Condition Of Microphone

MEASUREMENT OF SENSITIVITY



Frequency Response Curve

X : 1000 Hz
Y : -45.1 dBV/Pa
Y : -42.9 dBm/Pa
D : 0.0 dB

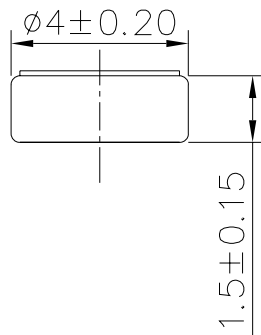
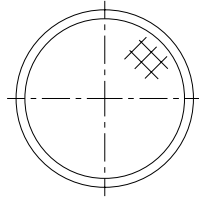


REV NO.

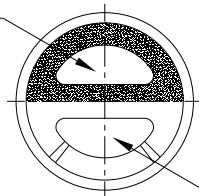
REVISION NOTE

APPROVAL

DATE



Term.1 (+)



Term.2 (-)

TITLE: <i>MICROPHONE</i>		DRAWN: <i>Richard</i> 08/06/2003	SCALE: 5:1	SHEET: 1 of 1
PART NO. <i>AM-040J46-NT</i>		DESIGNED: <i>R & D DEP.</i>	UNITS: <i>mm</i>	
DWG NO. <i>DTM-1294</i>	1 REV	CHECKED:	TOLERANCE ± 0.2	
		APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL \pm *** TWO PLACE DECIMAL \pm *** THREE PLACE DECIMAL \pm ***	
		MATERIAL: *****		

A & B Components

RELIABILITY TEST

AM-O40J46-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 ± 3 dB from initial sensitivity.	After any tests , the sensitivity to be within ± 3 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 ± 3 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 ± 3 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 ± 3 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.	Application of the "pin" type