# MESSRS.客户公司行號

# SPECIFICATION FOR APPROVAL

| 承                    | 認書                            |  |  |
|----------------------|-------------------------------|--|--|
| Product              | ELECTRET CONDENSER MICROPHONE |  |  |
| Part No.             | AMF-060G36-NB1                |  |  |
| Customer<br>Approval |                               |  |  |
| Customer<br>Part No. |                               |  |  |

| Approved By | Checked By  | Made By     |
|-------------|-------------|-------------|
| 工程部         | 工程部         | 工程部         |
| JASON CHEN  | ZACK GUO    | JERRY CHEN  |
| FEB-25-2014 | FEB-25-2014 | FEB-25-2014 |



## Advanced Acoustic Technology Corporation 吴宬股份有限公司//常州笠翔电子有限公司



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ISO 14001 Certified



# ADVANCED ACOUSTIC TECHNOLOGY CORP. 昊 宬 股 份 有 限 公 司

| REVISIONS |         |            |                               |  |
|-----------|---------|------------|-------------------------------|--|
| PRODUCT   |         | т          | ELECTRET CONDENSER MICROPHONE |  |
| PART NO.  |         | Э.         | AMF-O60G36-NB1                |  |
| REV.      | REVISER | DATE       | DESCRIPTION                   |  |
| 1         | JERRY   | 2014-02-25 | Creating new drawing SPEC.    |  |
|           |         |            |                               |  |
|           |         |            |                               |  |
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|           |         |            |                               |  |
|           |         |            | RoHS                          |  |
|           |         |            |                               |  |
|           |         |            |                               |  |

### **1. SPECIFICATIONS**

#### AMF-060G36-NB1

**RoHS** 

| 01 Electret's Type            | Foil type                                |  |  |  |
|-------------------------------|--|--|--|--|
| 02 Sensitivity                | -36±3dB (0dB=1V/Pa,1KHz)                 |  |  |  |
| 03 Standard Operation Voltage | 2.0 V                                    |  |  |  |
| 04 Output Impedance           | 2.2 ΚΩ                                   |  |  |  |
| 05 Directivity                | Omni directional                         |  |  |  |
| 06 Frequency Range            | 100 - 20K Hz                             |  |  |  |
| 07 Max. Operation Voltage     | 10V                                      |  |  |  |
| 08 Current Consumption        | Max.0.5mA                                |  |  |  |
| 09 Sensitivity Reduction      | Within -3dB 0dB=1V/Pa,1KHz Vs=2.0to 1.5V |  |  |  |
| 10 S/N Ratio                  | ≥58dB                                    |  |  |  |
| 11 Sound Pressure Level       | 110 dB                                   |  |  |  |
| 12 Operating Temperature      | -20~+60°C                                |  |  |  |
| 13 Storage Temperature        | -25~+70°℃                                |  |  |  |

#### 2. MEASURING METHOD

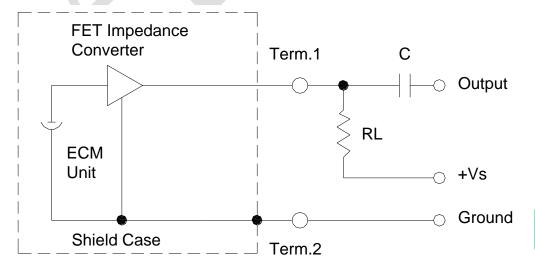
#### 2-1. Test Condition

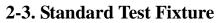
Standard Conditions: Generally Temperature 15~35°C Generally Humidity 45~85% Generally Atmospheric Pressure 860~1060hpa Basic Test Conditions: Temperature 20±2°C

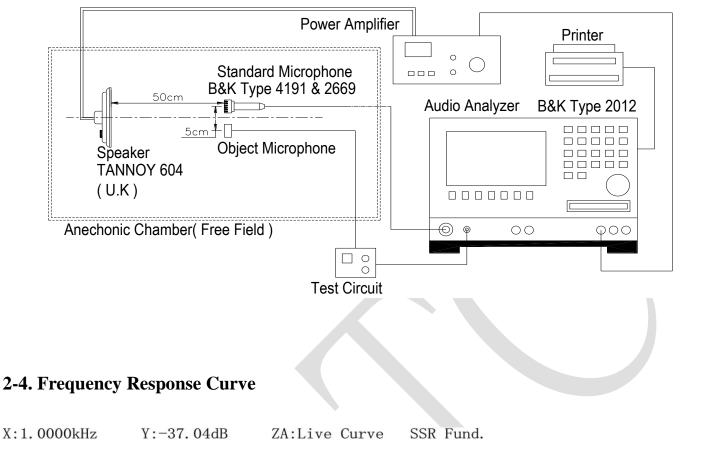
Humidity 60~70% Generally Atmospheric Pressure 860~1060hpa

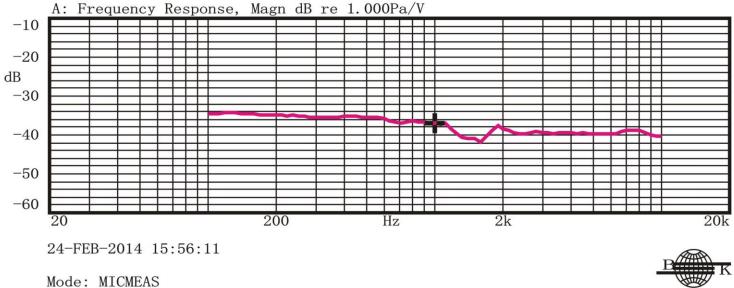
#### 2-2. Standard Test Circuit

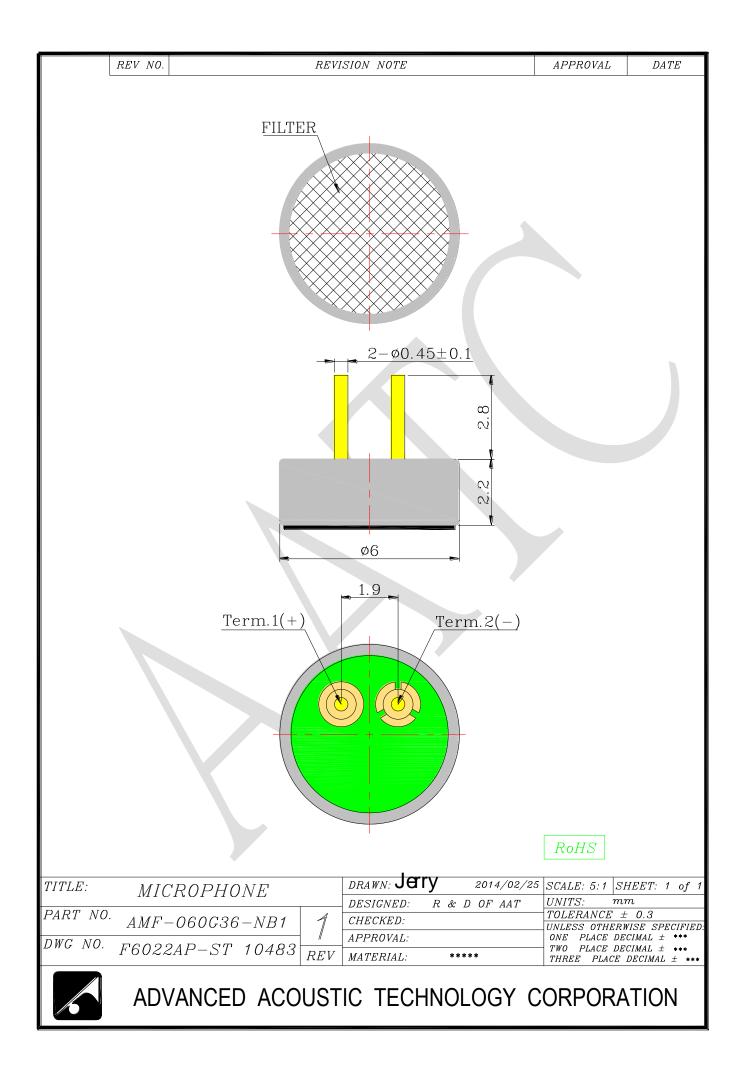
Vs=2.0V RL=2.2KΩ Te=20°C R.H.=60%











### 4. RELIABILITY TEST

| ltem |                  | Test Conditions   | Evaluation Standard               |  |
|------|------------------|---|-----------------------------------|--|
| 01   | High Temp. Test  | After exposure at 70 $^\circ\!\mathrm{C}$ for 96 hours  |                                   |  |
| 02   | Low Temp. Test   | After exposure at -25° $_{\rm C}$ for 96 hours  |                                   |  |
| 03   | Temp. Cycle Test | A After exposure at $70^{\circ}$ C for 30 minutes, at room temp. for 10 minutes, at -25 $^{\circ}$ C for 30 minutes, at room temp. for 10 minutes, at 5 cycles. | After any tests , the sensitivity |  |
| 04   | Humidity Test    | After exposure at $40^{\circ}$ C and $90+5\%$ relative keep their initial operation   |                                   |  |
| 05   | Vibration Test   | 10~50Hz for 1 minute full amplitude 1.52mm<br>for 2 hours at three axis.  |                                   |  |
| 06   | Drop test        | The microphone unit without packaged must<br>be subjected to each 3 drops at three axis<br>from the height of 1 meter to 20mm thick<br>hardwood.                |                                   |  |

## **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:

- a. Recommend using constant searing-iron in temperature range 330±5°C.
- b. Soldering time 2 seconds.
- c. Don't stay any hole or dust when soldering.
- d. To avoid the microphone be broken by static electricity, the people and working station should install prevent static electricity equipment.

### **5.PACKING**

|              | DRAWING | QTY(PCS) | SIZE(MM)   | MATERIAL | MARKING |
|--------------|---------|----------|------------|----------|---------|
| PACKING      |         | 100      | 99×99×3    | Sponge   |         |
|              |         | 100      | 100×100×8  | Paper    |         |
| MIDDLE       |         | 1000     | 204×104×45 | Paper    |         |
| OUTER<br>BOX |         |          |            | Paper    |         |