1、Scope: The specification describes the requirements of a omni-directional condenser microphone for use in telephone, general use.

2、Electrical requirements: Vss=4.5V,RL=2.2KΩ

2-1、Sensitivity :-60±3dB ,0 dB=1V/μbar (-40±3dB at 0 dB = 1V/ Pa)

2-2、Output impedance :Less than 2.2KΩ

2-3、Directivity :Omni-directional

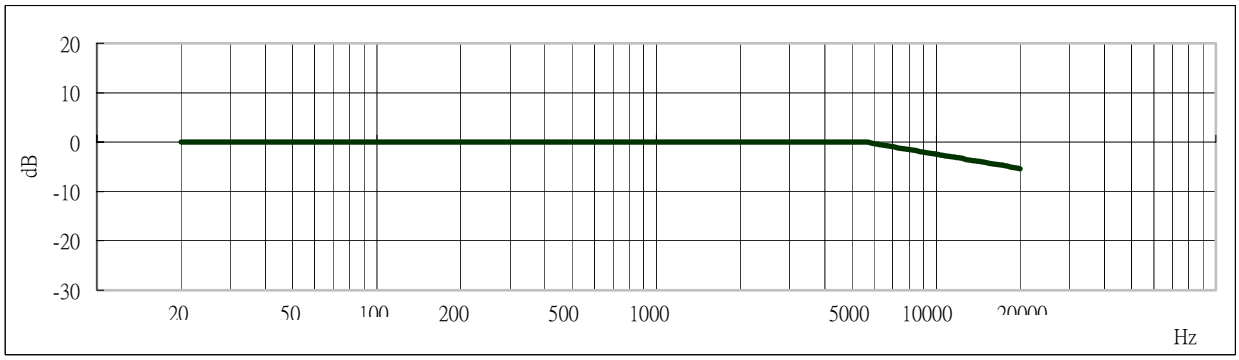
2-4、Power consumption :Less than 500 μA

2-5、S/N ratio :More than 60dB

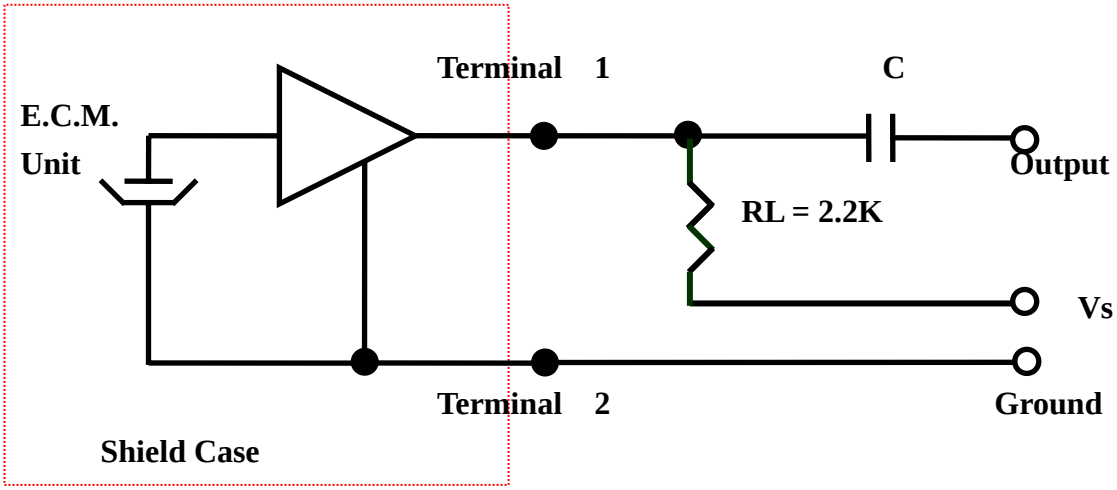
2-6、Max. input sound level :120 dB SPL

2-7、Voltage reduction characteristic :Less than 3dB from 2V to 1.1V

2-8、Frequency response:



2-9、Measurement schematic



2-10、Operating voltage range : 1.0V~10V

3、Mechanical requirements :

3-1、Dimension : ∅9.7 ×6.7 mm

3-2、Weight : Less than 0.75 g

3-3、Soldering heat shock : After soldering heat shock at 260±5°C for 3±1 seconds . The microphone should be without damage.

3-4、Terminal strength :After applied a 1 Kg force on terminal for 1 minute. The microphone should be without damage.

3-5、Operating temperature range : -20 °C~ 60 °C

3-6、Storage temperature range : -30 °C~ 70 °C

4、Reliability test :

4-1、Vibration test :After vibrations with 10Hz~55Hz，full amplitude 2mm each 3 minutes for 30 minutes at three axes. The sensitivity should be within ±3 dB form initial value.

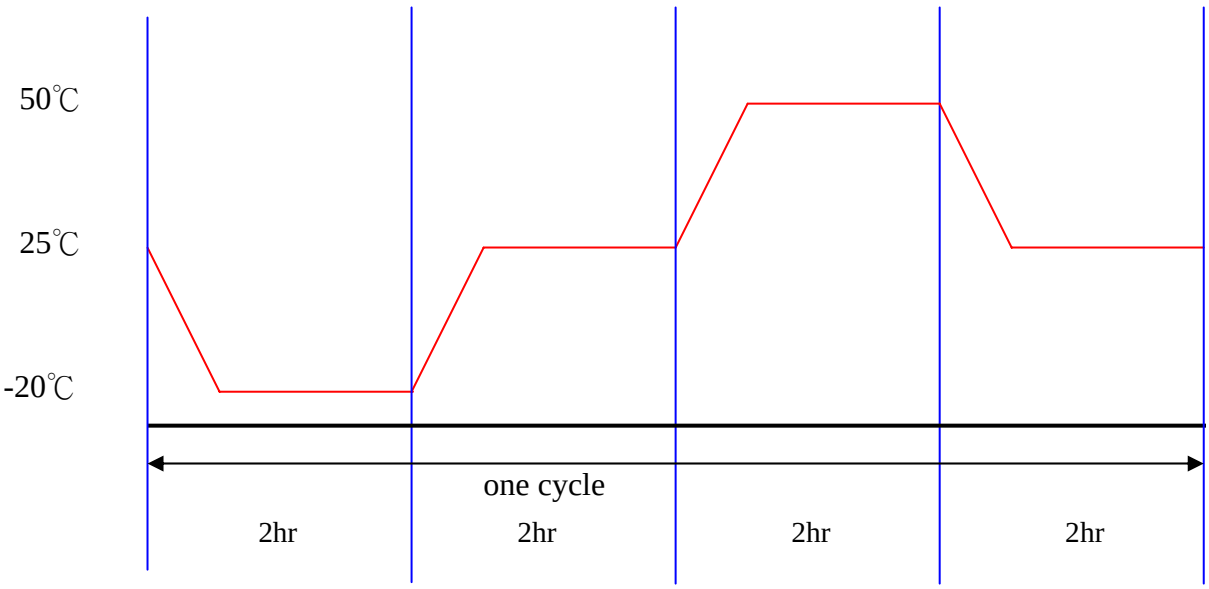
4-2、Drop test :After drop form 1 meter height to concrete floor，each 5 face for 5 times with packing. The sensitivity should be with ±3 dB from initial value.

4-3、Humidity test :After exposure at 40 ±2 °C and 90%~95% humidity for 48 hours. The sensitivity should be with ±3 dB form initial value.
(The measurement should be done after 3 hours at conditioning 25±2 °C.)

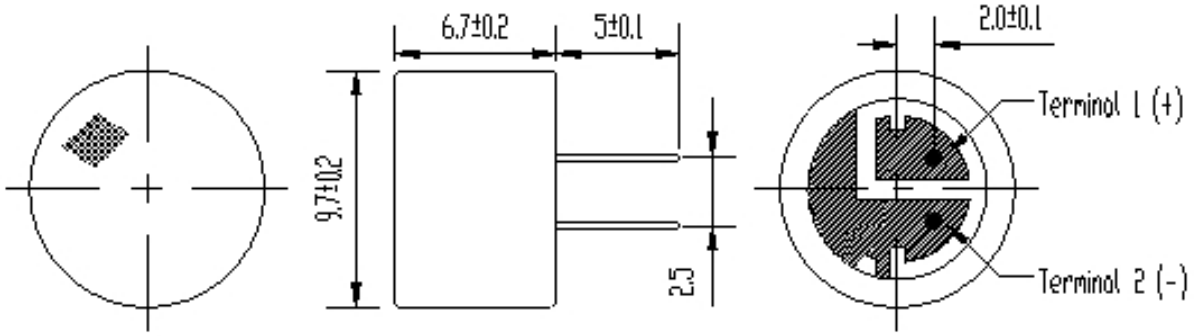
4-4、High temperature test :After exposure at 50 ±2 °C for 48 hours. The sensitivity should be with ±3 dB from initial value.
(The measurement should be done after 3 hours at conditioning 25±2 °C.)

4-5、Low temperature test :After exposure at –20 ±2 °C for 48 hours. The sensitivity should be with ±3 dB from initial value.
(The measurement should be done after 3 hours，at conditioning 25±2 °C.)

4-6、Temperature cycle test :After exposure at –20 ±2 °C for 2 hours，at 25 ±2 °C for 2 hours，at 50 ±2 °C for 2 hours，5 cycles.
The sensitivity should be with ±3 dB from initial value.
(The measurement should be done after 3 hours at conditioning 25±2 °C.)



5、Dimension:



Unit : mm