SPECIFICATION

Customer : AMSI COMPONENTS,CO

Applied To :

Product Name : MIC

Part No : KPCM-97H67P-38dB

Drawing No. : KF3.002.644.38

Signature of Approval

Signature of KEPO

Approved by	Checked by	Issued by	Date

ISO9001 Certificate

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CONTENTS

1. Scope

This specification is applied to the MIC which is used all of the electrical acoustic product.

-- applications: mobile phone, PDA, notebook computer, etc.

2. General

2.1 Out-Diameter : Ø9.7mm
2.2 Height : 6.7mm
2.3 Weight : ≦0.3gr.
2.4 Operating Temperature range:
25~+70℃ without loss of function
2.5 Store Temperature range:
-25~+70℃ without loss of functio

3. Electrical and Acoustic Characteristics

Test condition : 15 ~ 35 ℃, 25% ~ 85% RH, 860~1060 mbar

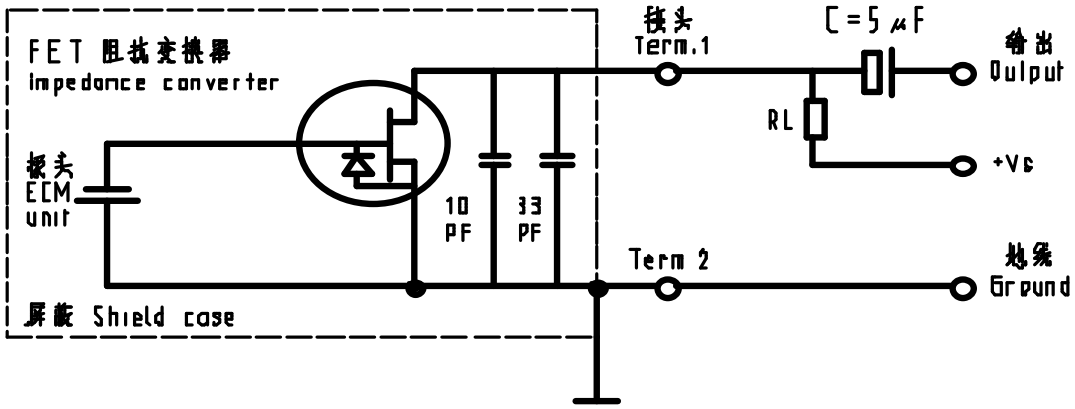
NO.	Items	Specifications
1	Rated Voltage	4.5V
2	Operating Voltage	1V~10V
3	Sensitivity	-38± 3dB (0dB=1V/Pa 1KHz)
4	Current Consumption	0.5mA Max
5	Frequency	100~16,000Hz
6	S/N Ratio	⩾60dB
7	Sensitivity Reduction	within-3dB at 1.5V
8	Directivity	Omnidirectional
9	Testing Condition	1000Hz, Vs=4.5V, RL=2.0K Ω
10	Shell Material/Color	AL/Silver
Note:		

4. Reliability Test

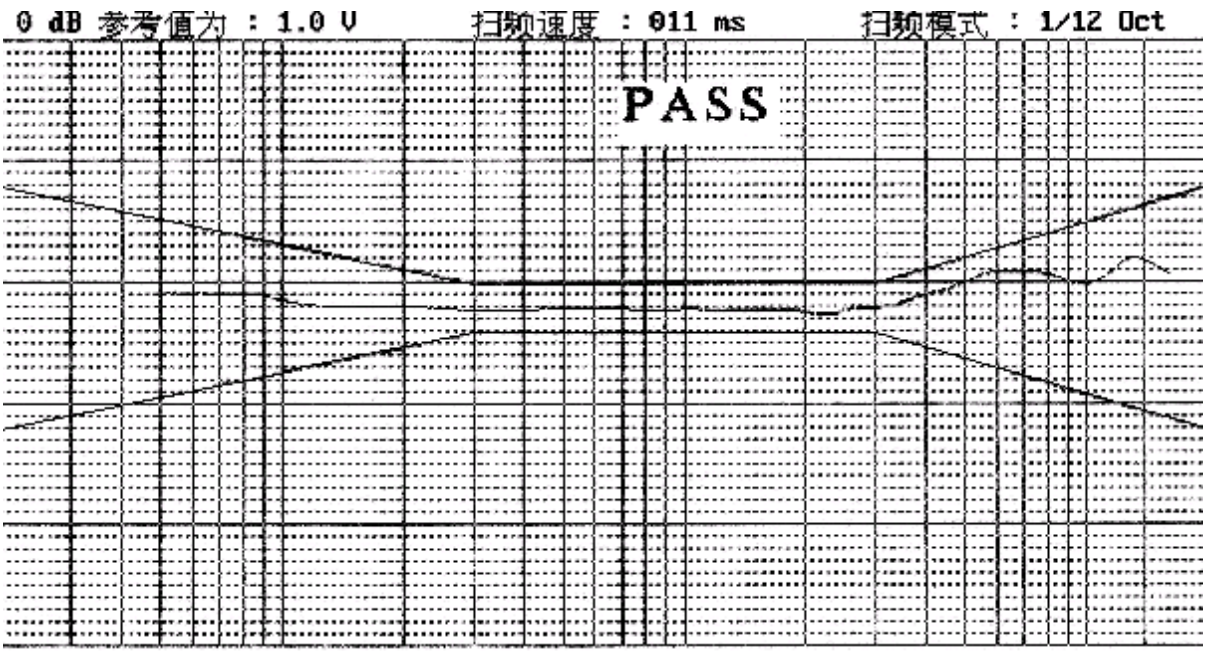
After test (1-5items), MIC being placed in 20 ℃ for 3 hours, the sensitivity should be within ± 3dB from initial sensitivity .

	Item	Specification
1	Vibration test	Amplitude: 1.52mm Duration: 1 minute Frequency range: 10Hz~55Hz 2 hours in each of 3 axes
2	Shocks test	Pulse Shape Half Sinusoidal Puise Duration 11ms Acceleration 150m/s2 Number of Jolts 10 in each of 3 axes
3	High/Low temperature test	70℃ for 96hrs , -20℃ for 96hrs
4	Damp Heat test	90%RH,+40℃ for 120hrs
5	Temperature Cycles test	-25℃←→20℃←→70℃←→20℃ (30m) (10m) (30m) (10m) 5cycles
6	Temperature Change Test	Low temperature -40 ℃ High temperature +85 ℃ Changeover time 30min Duration 60min Cycle 32
7	Drop Test	Drop a unit unpacked onto a board Height: 1m Cycle: 6 (1 each plane)
8	Drop Test	The microphone under test must be discharged between each ESD exposure without ground.(contact: ± 8Kv,air: ± 15Kv)There is no interference in operation after 10 times exposure.

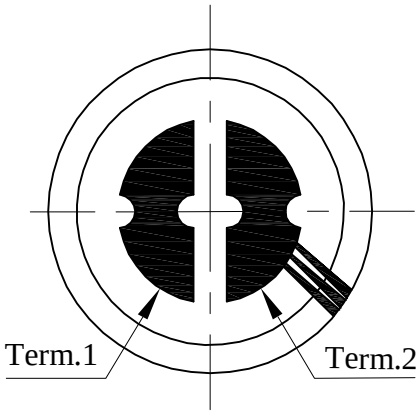
5.**Measurement Circuit** (Test Condition Vs=4.5V RL=2.0K Ω Ta=20℃ R.H=65%)

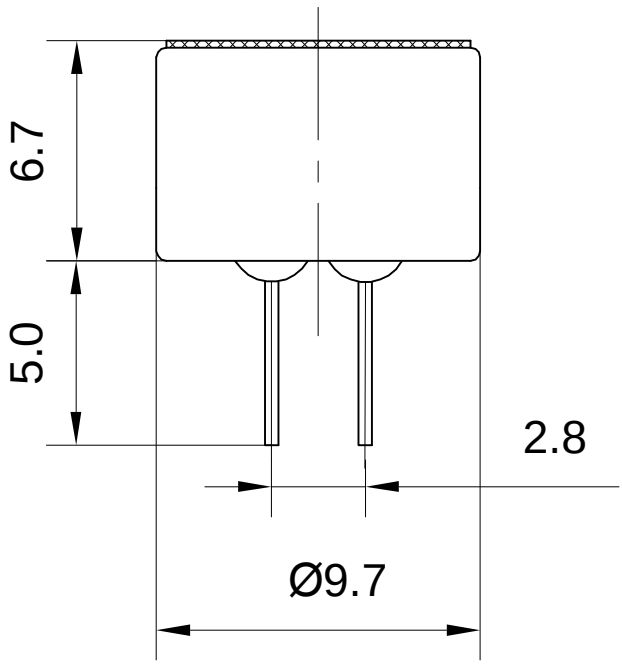


Typical Frequency Response Curve



6. Dimensions





FIRST ANGLE PROJECTION

UNIT : mm

Tolerance : ± 0.2

7. Cautions

7.1 Please use the diminutive electric iron less than 20W for the soldering type microphone .

7.2 The temperature of the working surface shall be under 270℃ during soldering process.

7.3 E.C.M shall be fixed on the device with well Radiation during soldering process.

7.4 The soldering time for each terminal shall be within 1~2 sec.

7.5 The soldering point should not appear any pinholes after soldering.

7.6 E.C.M may easily be destroyed by the static electricity, so some measures against the static electricity shall be adopted (soldering instrument , worktable , body of operator should be grounded)

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