

SPECIFICATION

Customer : SEA COMPANY

Applied To :

Product Name : MIC

Model Name : KPCM-97H45-56dB

Drawing No. : KF3.002.214

Signature of Approval

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Signature of KEPO

Approved by	Checked by	Issued by	Date



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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 : 4.5mm

2.3 Weight : 0.1 gr.

2.4 Operating Temperature range:

-20~+70 °C without loss of function

2.5 Store Temperature range:

-20~+70 °C without loss of function

3. Electrical Characteristics.

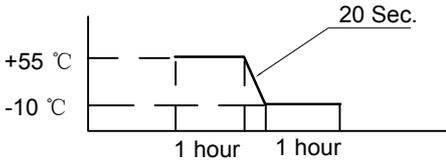
Test condition : 15 ~ 35 °C, 25% ~ 85% RH, 860~1060 mbar

NO.	Items	Specifications
1	Rated Voltage	2.0V
2	Operating Voltage	1.0V~10V
3	Sensitivity	-56± 2dB at 1KHz(0dB=1V/ μ bar)
4	Current Consumption	0.5mA Max
5	Frequency	100~16,000Hz
6	S/N Ratio	≥40dB
7	Sensitivity Reduction	within-3dB at 1.5V
8	Directivity	Omnidirectional
9	Testing Condition	1000Hz, Vs=2.0V, RL=2.2K Ω
10	Shell Material/Color	AL/Silver
Note:		

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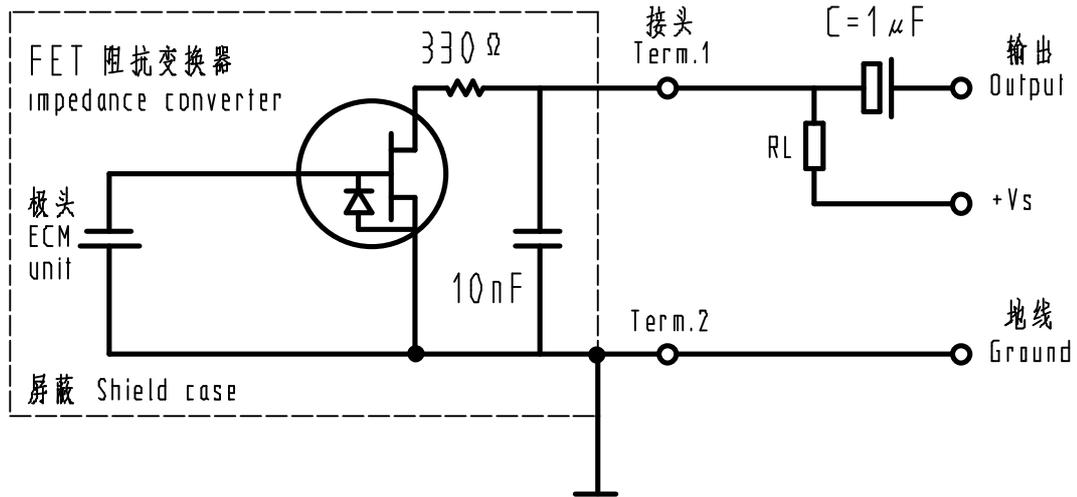
4. Reliability Test

After test(1~7item), the MIC sensitivity to be within +/-3dB from initial sensitivity.

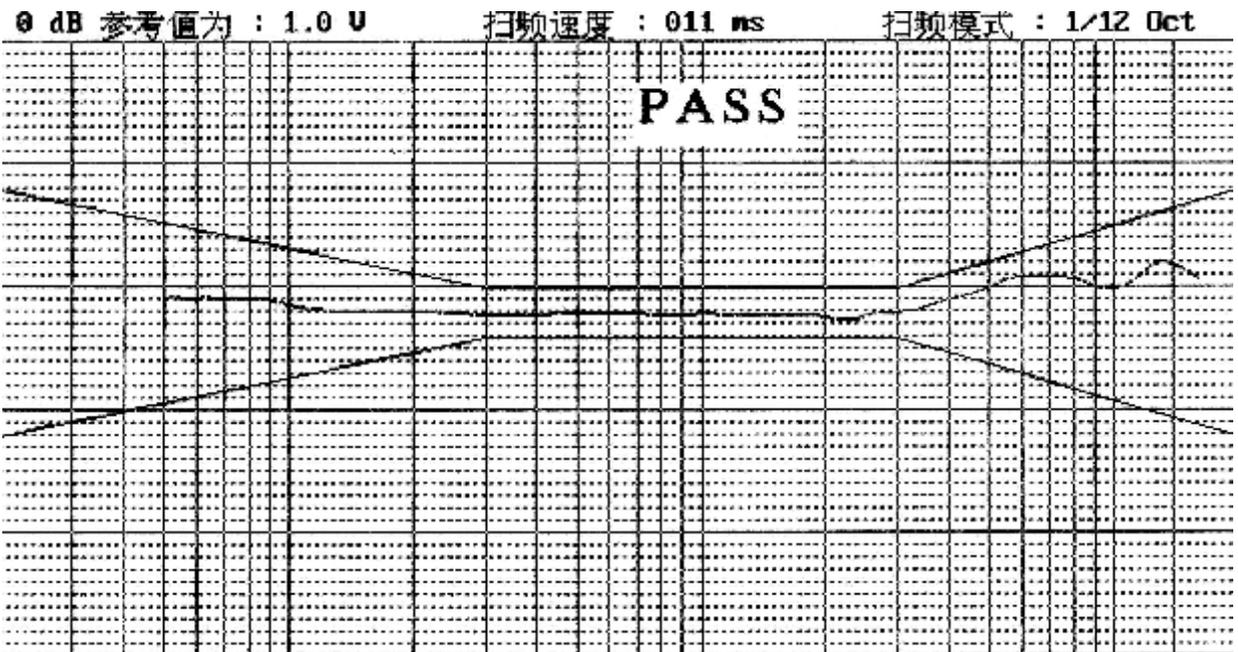
	Item	Specification
1	High Temperature Test	After being placed in a chamber with $+70\pm 3\text{ }^{\circ}\text{C}$ for 48hours and then being placed in natural condition for 1 hour
2	Low Temperature Test	After being placed in a chamber with $-20\pm 3\text{ }^{\circ}\text{C}$ for 48 hours and then being placed in natural condition for 1 hour
3	Humidity Test	To be no interference in operation after storage test at temperature $60\pm 2\text{ }^{\circ}\text{C}$ and relative humidity ($93\pm 3\%$) for 48 hours. the sensitivity to be within +/-3dB from initial sensitivity. the test is performed at temperature $20\text{ }^{\circ}\text{C}$ after operation for 6 hours.
4	Thermal Shock Test	<p>After being placed in a chamber at $+55\text{ }^{\circ}\text{C}$ for 1 hour, then receiver shall be placed in a chamber at $-10\text{ }^{\circ}\text{C}$ for 1 hour(1 cycle is the below diagram).</p> <p>After 5above cycles, receiver shall be measured after being placed in natural condition for 1 hour.</p> 
5	Vibration Test	To be no interference in operation after vibration of full amplitude 2mm for 30minutes at five axis
6	Drop Test	To be no interference in operation after dropped to concrete floor each time from 1 meter height of five directions in state of packing
7	Collision Test	After collided with the acceleration $100\pm 10\text{m/s}$, at the vertical & horizontal directions for 1000 ± 10 times, at the state of packing. Change of sensitivity within +/-3dB from initial.
8		

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5. Measurement Circuit (Test Condition VS=2.0V RI=2.2K Ω
Ta=20°C R.H=65%)

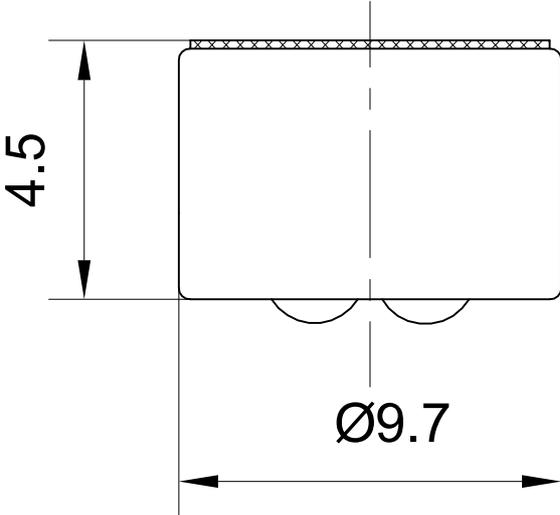
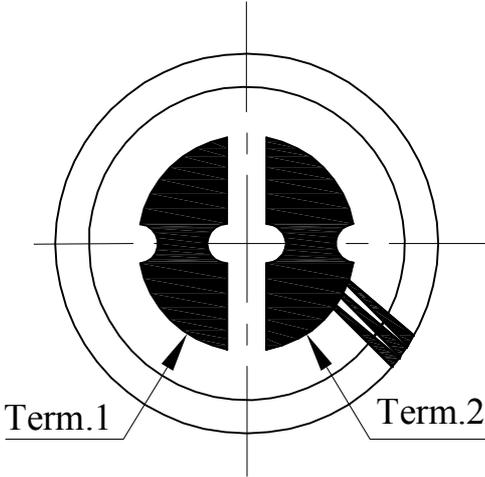


Typical Frequency Response CU+rve



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7. Dimensions



FIRST ANGLE PROJECTION

UNIT : mm
Tolerance : ±0.2