

# SPECIFICATION

Customer : Ryston

Applied To :

Product Name : MIC




Model Name : KPCM-60H50-56dB

Drawing No. : KF3.002.357.56

Signature of Approval

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Signature of KEPO

Approved by	Checked by	Issued by	Date
			028-07-29



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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 : 6.7mm

2.3 Weight : 0.1 gr.

2.4 Operating Temperature range:

-10~+55°C without loss of function

2.5 Store Temperature range:

-20~+60°C without loss of function

## 3. Electrical Characteristics.

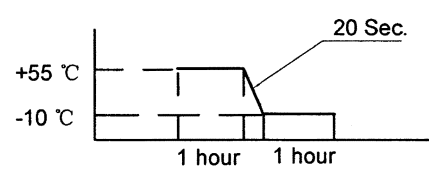
Test condition : 15 ~ 35 °C, 25% ~ 85% RH, 860~1060 mbar

NO.	Items	Specifications
1	Rated Voltage	4.5V
2	Operating Voltage	1.5V~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	≥60dB
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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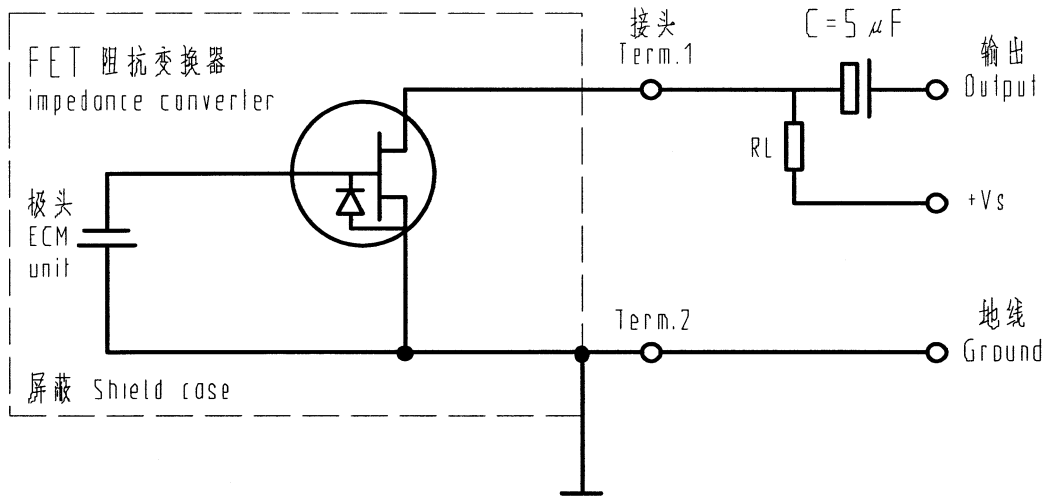
#### 4. Reliability Test

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 <math>+55\text{ }^{\circ}\text{C}</math> for 1 hour, then receiver shall be placed in a chamber at <math>-10\text{ }^{\circ}\text{C}</math> 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 $1000\pm 10$ times, at the state of packing. Change of sensitivity within +/-3dB from initial.
8		

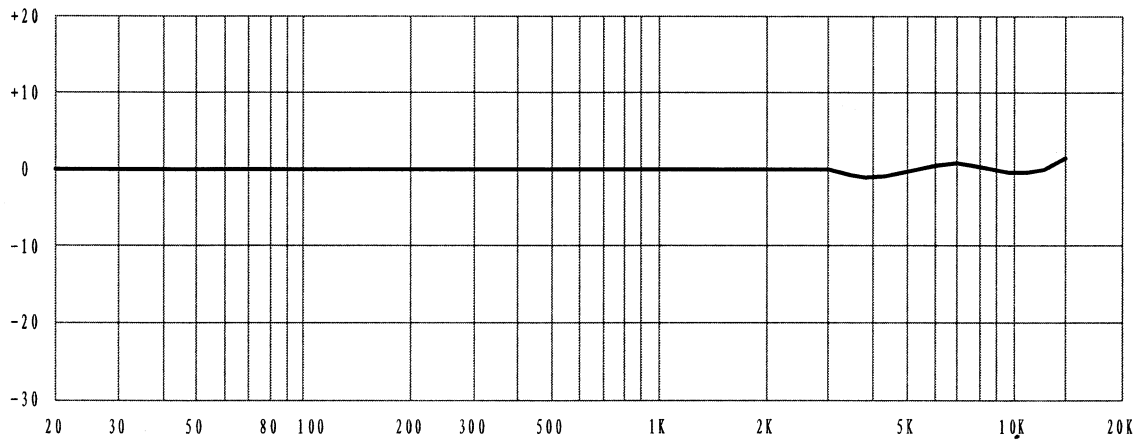
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**5.Measurement Circuit** (Test Condition VS=2.0V RI=2.2K Ω  
Ta=20°C R.H=65%)



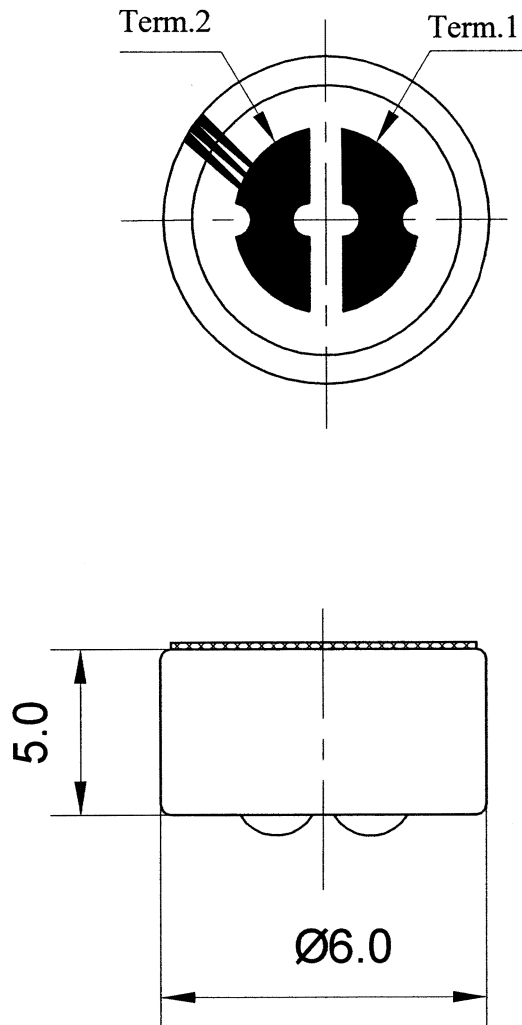
**Frequency Response**

Typical Frequency Response Curve

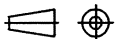


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## 7. Dimensions



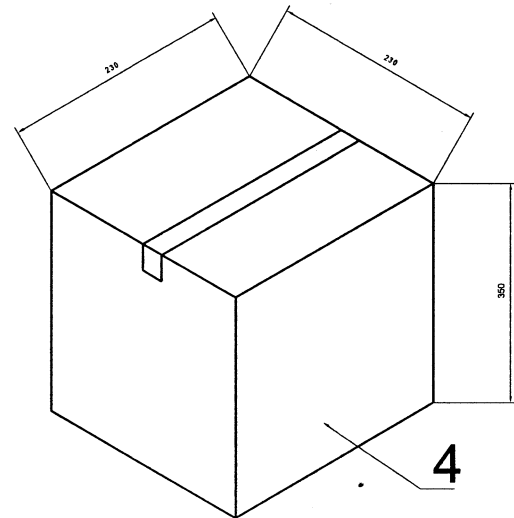
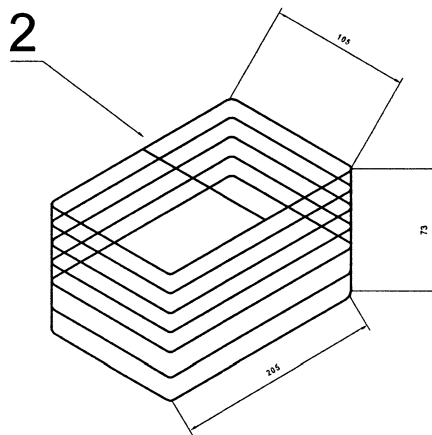
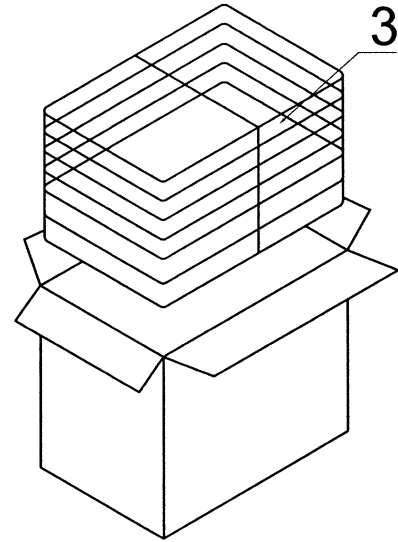
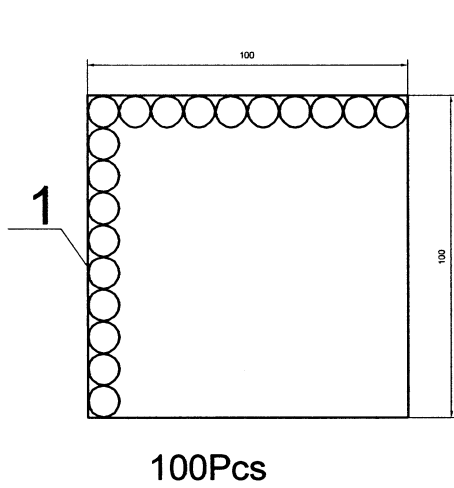
FIRST ANGLE PROJECTION



UNIT : mm  
Tolerance :  $\pm 0.2$

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## 8. Packing



QTY: 8000Pcs  
230X230X350