



SPECIFICATION

PRODUCT TYPE: OF6027P2.8-2A423

Engineering No.:

Customer Material Code:

Customer Type:

DSND BY		
CHKD BY		
APRVD BY		

宁波市鄞州区合意电子元件厂

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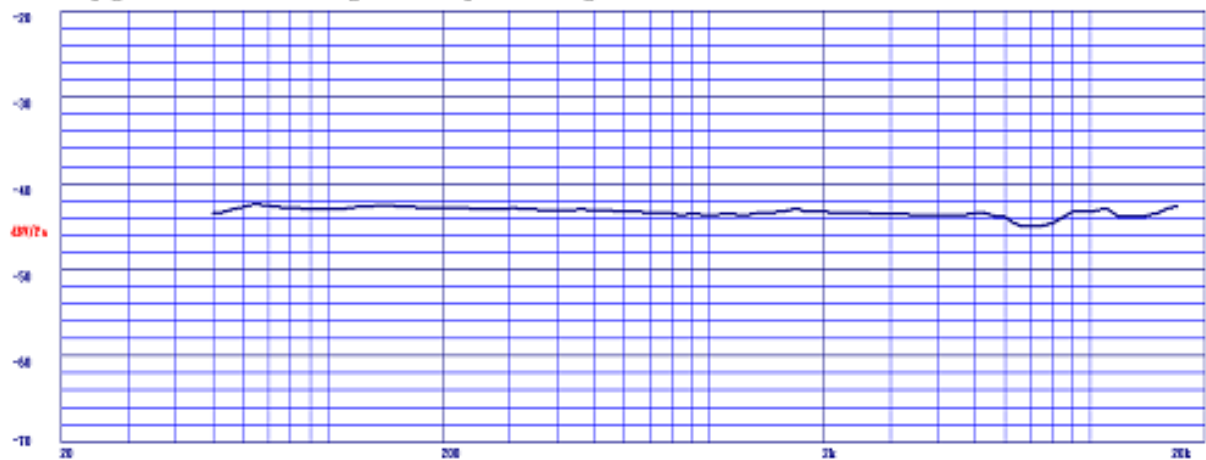
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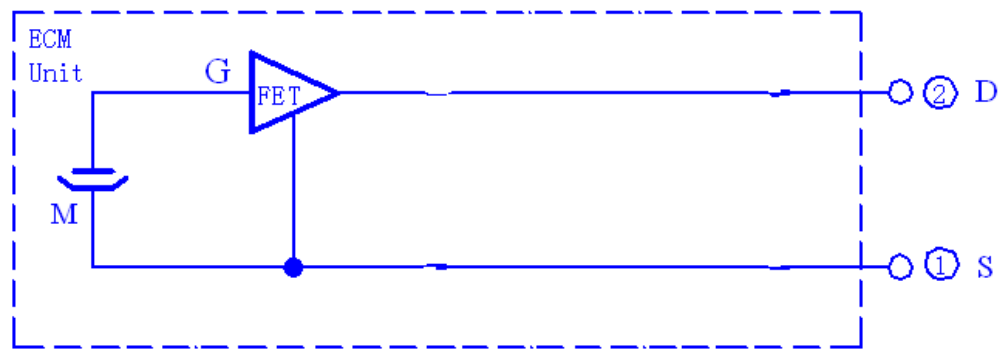
1	Name: Omnidirectional Electret Condenser Microphone (Foil Electret Type)	
2	TYPE: OF6027P2.8-2A423	
3	Electrical Specifications:	
3.1	Sensitivity Range	-42±3dB RL=2.2K Ω Vs=2.0V (1KHz 0dB=1V/Pa)
3.2	Impedance	Max. 2.2K Ω 1KHz (RL=2.2K Ω)
3.3	Frequency	50-16000Hz
3.4	Current Consumption	Max.0.5mA RL=2.2K Ω Vs=2.0V
3.5	Operation Voltage Range	1.0V-10V(DC)
3.6	Max. Sound Pressure Level	More than 114dB S.P.L (1KHz, THD<3%)
3.7	S/N Ratio	More than 58dB (1KHz 0dB=1V/Pa, A Weighted)
3.8	Sensitivity Reduction	3.0V-2.0V Sensitivity Variation less than 3dB

3.9 Typical Frequency Response Curve: L=50cm

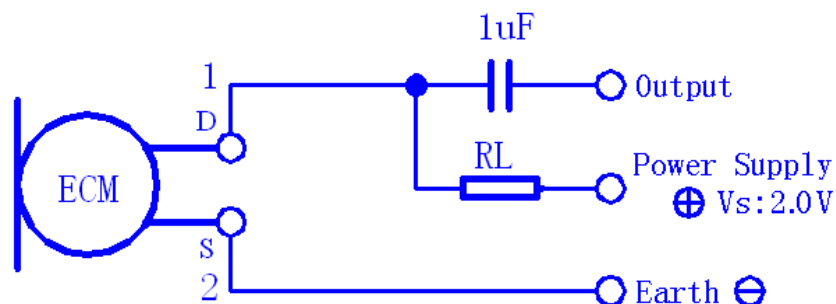
Typical Frequency Response Curve: B&K2012



3.10 Microphone Circuit Diagram:



3.11 Schematic Measuring Diagram:

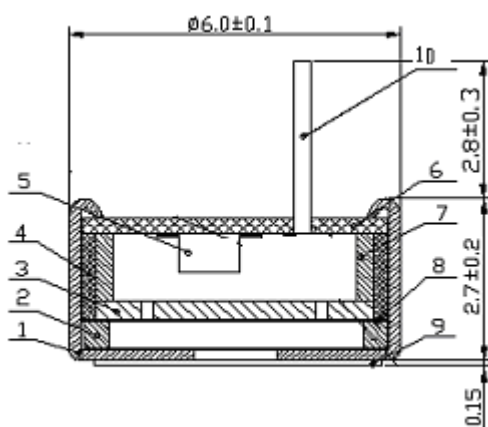


RL: 2.2K Ω (external resistance)

4 Mechanical Specifications:

4.1

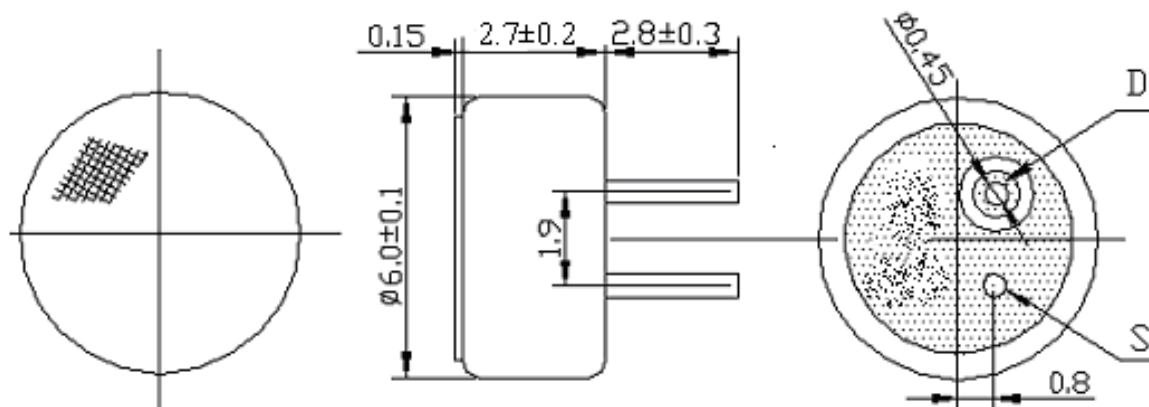
Drawing



NO.	NAME	MATERIAL	QTY	REMARK
10	PIN		2	
9	FELT	Cotton desron textile	1	
8	SPACER	Polyster film	1	
7	ELECTRET RING	H65	1	
6	P.C.B	Glass fiber	1	
5	F.E.T		1	
4	HOUSPING CHAMBER		1	
3	ELECTRET BACK	H62+FEP	1	
2	POLARIZED DIAPHRAGM	PET	1	DUPONT
1	CASE	AL	1	

4.2

Dimension (mm):



4.3

Weight

0.3g

4.4

Mechanical Intensity

To be no interference in operation after pulled the terminals with 1.0Kg weight for 1 minute.

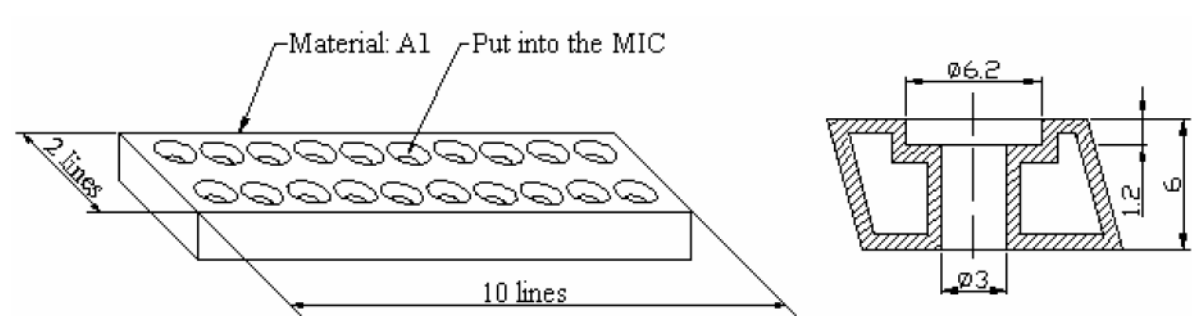
5. Reliability Tests: After any following tests, the sensitivity of the microphone unit shall not change more than $\pm 3\text{dB}$ from initial value, and shall keep their initial operation and appearance.

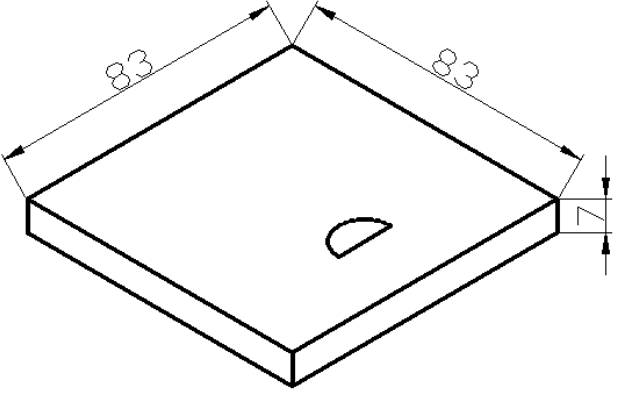
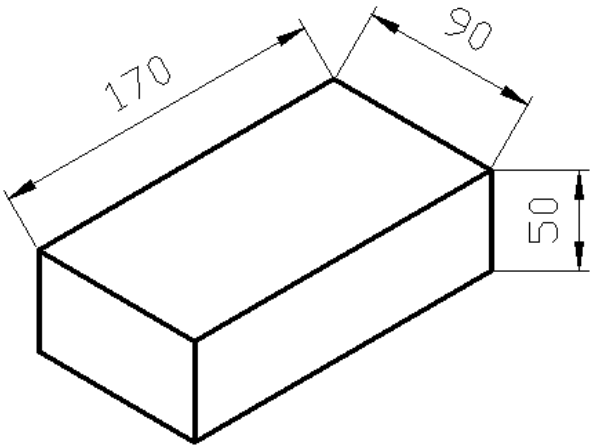
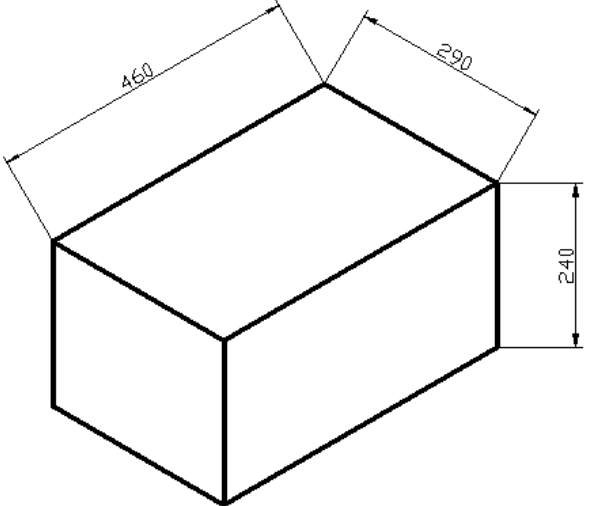
5.1	VIBRATION TEST	To be no interference in operation after vibrations. 10Hz to 55Hz for 1 minute full amplitude 1.52mm, for 2 hours at three axes.
5.2	DROP TEST	To be no interference in operation after dropped to concrete floor three times from 1 meter height in state of packing.
5.3	TEMPERATURE TEST	- After exposure at $+70^{\circ}\text{C}$ for 200 hours, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. (The measurement to be done after 2 hours of conditioning at room temperature) - After exposure at -25°C for 200 hours, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. (The measurement to be done after 2 hours of conditioning at room temperature)
5.4	HUMIDITY TEST	After exposure at 60°C and $95\% \pm 2\%$ relative humidity for 200 hours, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. (The measurement to be done after 2 hours of conditioning at room temperature)
5.5	TEMPERATURE CYCLE TEST	After exposure at -25°C for 30 minutes, at 20°C for 10 minutes, at 70°C for 30 minutes, at 20°C for 10 minutes. 5 cycles, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. (The measurement to be done after 2 hours of conditioning at room temperature)
5.6	TEMPERATURE SHOCK	Temperature change from -40°C to 85°C for 30 minutes. (changing time: 20 sec.) after 32 cycles, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. (The measurement to be done after 2 hours of conditioning at room temperature)

6 Environmental Condition:

6.1	Storage condition	$-25^{\circ}\text{C} \sim +70^{\circ}\text{C}$ R.H. less than 90%
6.2	Operation condition	$-25^{\circ}\text{C} \sim +70^{\circ}\text{C}$ R.H. less than 90%
6.3	Arbitration condition	Temperature : $20^{\circ}\text{C} \pm 1^{\circ}\text{C}$ Relative humidity: 63%~67% Air pressure : 86~106Kpa

7 Notices:

7.1	Always Avoid bringing pinholes on the soldering terminal during the operation to the omi-directional microphones.
7.2	Operators, the solder fixtures and the soldering irons must be statically grounded under each soldering process.
7.3	<p>All the soldering procedures upon microphones must be completed in a metallic device, the temperature of the soldering irons must be limited as $320^{\circ}\text{C} \pm 10^{\circ}\text{C}$. Soldering time should not exceed 2 Seconds.</p> 

8	Packing Specification: Reference				
		Drawing(Unit: mm)	Qty (pcs.)	Material	Marking
	Packing		100	Anti-static Paper	
	Middle Box		10×100	Paper	
	Outer Box		20×1000	Paper	Particular for Customer's P.O