



HITPOINT

SPECIFICATION

PRODUCT TYPE: PMO-6027P-40KDO
(RoHS)

DSND BY		
CHKD BY		
APVD BY		

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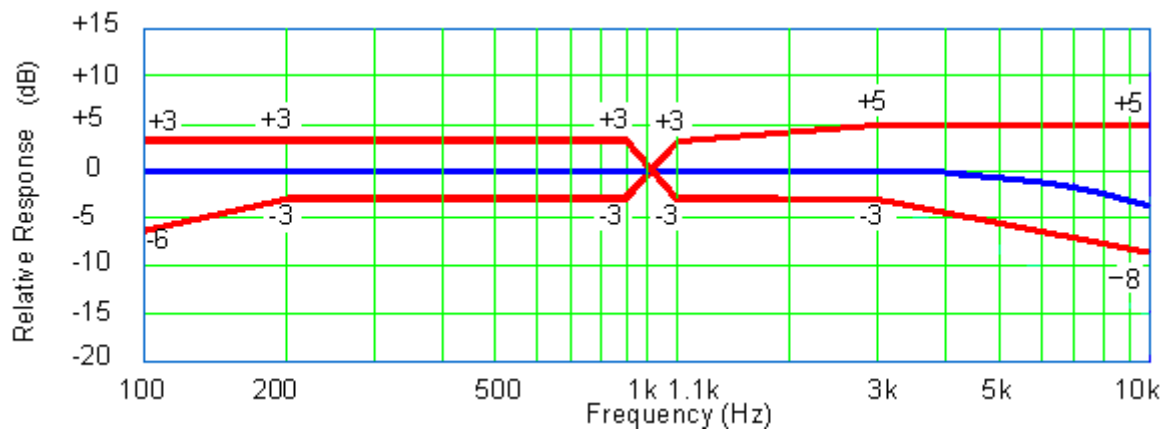
1 Name : Omni-directional Electret Condenser Microphone (Foil Electret Type)

2 TYPE : PMO-6027P-40KDQ

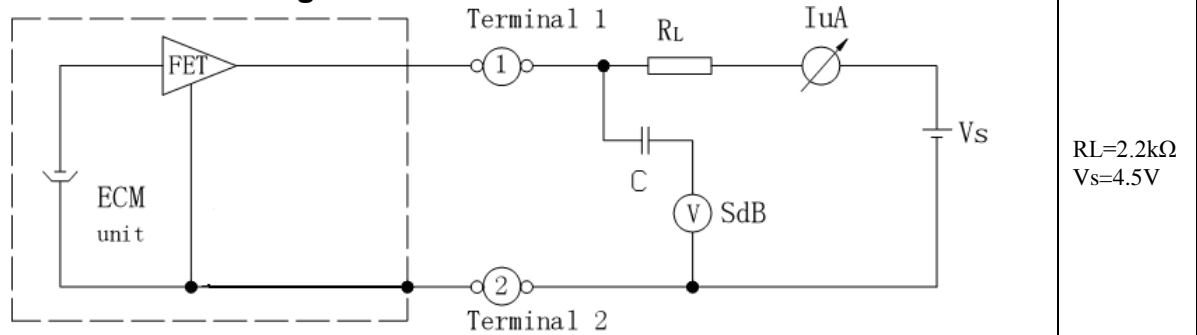
3 Electrical Specifications:

3.1	Sensitivity Range	-40±2dB $R_L=2.2K\Omega$ $V_s=4.5V$ (DC) (1KHz 0dB=1V/Pa)
3.2	Impedance	Max. 2.2K Ω 1KHz ($R_L=2.2K\Omega$)
3.3	Frequency	100-10000Hz
3.4	Current Consumption	Max. 500 μ A $R_L=2.2K\Omega$ $V_s=4.5V$ (DC)
3.5	Operation Voltage Range	1.0V-10V (DC)
3.6	Max. Sound Pressure Level	115dB S.P.L
3.7	S/N Ratio	More than 58dB 1kHz,0dB=1V/Pa,A-weight
3.8	Sensitivity Reduction	4.5V-3.0V Sensitivity Variation less than 3dB

3.9 Typical Frequency Response Curve:

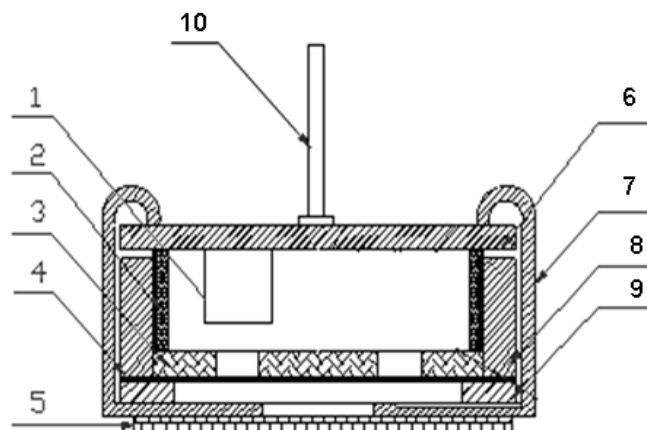


3.10 Schematic Diagram:



4 Mechanical Specifications:

4.1 Drawing



No.	Name	Number
1	FET	1
2	Cooper ring	1
3	Back plate	1
4	Insulating spacer	1
5	Cloth	1
6	PCB	1
7	Case	1
8	Base	1
9	D/P	1
10	PIN	2

	4.2	Accessory Drawing of MIC: Unmarked tolerance is $\pm 0.15(\text{mm})$	
	4.3	Weight	0.05g
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	Hi-Temp. Test	To be no interference in operation after high temperature test $70\pm 3^{\circ}\text{C}$ for 48 hours The sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity.
	5.2	Low-Temp. Test	To be no interference in operation after Low temperature test $-20\pm 3^{\circ}\text{C}$ for 48 hours, the sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity.
	5.3	Isotherm& ISO-humidity Test	To be no interference in operation after storage test at temperature $40\pm 3^{\circ}\text{C}$ and relative humidity $(93\pm 3\%)$ for 48 hours. The sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. the test is performed at temperature 20°C after operation for 6 hours.
	5.4	Temperature Cycle Test	After exposure at $+55\pm 2^{\circ}\text{C}$ for 1 hour, at $20\pm 2^{\circ}\text{C}$ for 1 hour, at $-10\pm 2^{\circ}\text{C}$ for 1 hour, at $20\pm 2^{\circ}\text{C}$ for 1 hour, with 5 cycles. Change of sensitivity within $\pm 3\text{dB}$ from initial measuring should be done after 2 hours exposed to $20\pm 2^{\circ}\text{C}$.
	5.5	Vibration Test	To be no interference in operation after vibration of full amplitude 2mm for 30 minutes at three axis, the sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity.
	5.6	Dropping Test	To be no interference in operation after dropped to concrete floor each time from 1- meter height of three directions in state of packing, the sensitivity to be within $\pm 3\text{dB}$ fro-initial sensitivity.
	5.7	Static Electricity Destruction	According to the third item of the standard of IEC61000 1.Contact discharge Charge 6000v DC to the capacitor with 150pF, and discharge the output of the MIC ten times through the resistance of $330\ \Omega$, then check and test it. 2.Air discharge Charge 8000v DC to the capacitor with 150pF, and discharge the sound hole. of the MIC ten times through the resistance of $330\ \Omega$, then check and test it.
	6 Environmental Condition:		
	6.1	Storage condition	$-20^{\circ}\text{C}\sim +60^{\circ}\text{C}$ R.H. less than 45%~75%
	6.2	Operation condition	$-10^{\circ}\text{C}\sim +45^{\circ}\text{C}$ R.H. less than 85%
	7 Notices:		
	7.1	All the soldering procedures upon microphones must be completed in a metallic device, the temperature of the soldering iron must be limited as $320^{\circ}\text{C}\pm 10^{\circ}\text{C}$.	
	7.2	Operators, the solder fixtures and the soldering irons must be statically grounded under each soldering process.	