



HITPOINT

SPECIFICATION

PRODUCT TYPE: PMOF-6027PN-42KDO

(RoHS)

DSND BY		
CHKD BY		
APVD BY		

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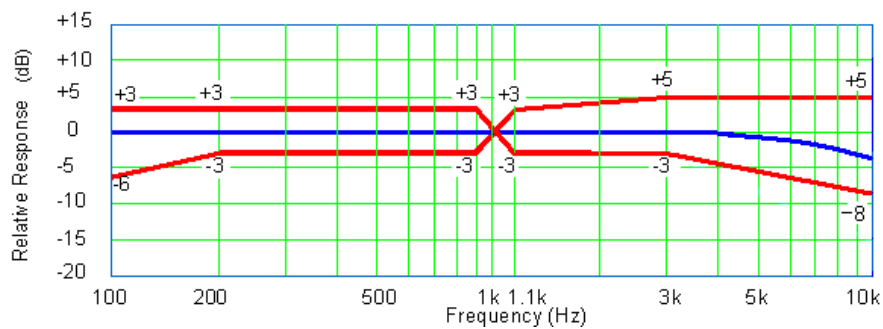
1 **Name: Omnidirectional Electret Condenser Microphone (Front Electret Type)**

2 **TYPE: PMOF-6027PN-42KDQ**

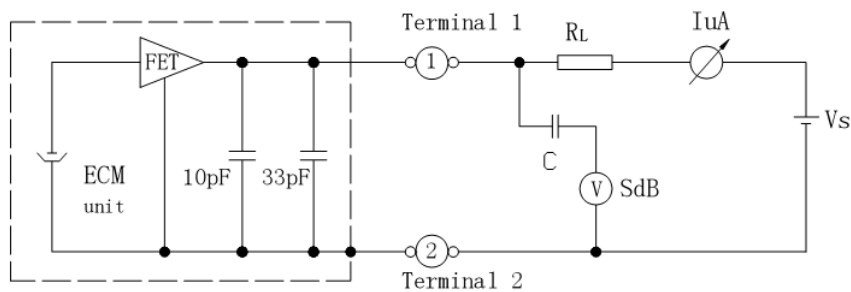
3 **Electrical Specifications:**

3.1	Sensitivity Range	-42±3dB RL=2.2KΩ Vs=2.0V (DC) (1KHz 0dB=1V/Pa)
3.2	Impedance	Max. 2.2KΩ 1KHz (RL=2.2KΩ)
3.3	Frequency	100-10000Hz
3.4	Current Consumption	Max. 500µA RL=2.2KΩ Vs=2.0V (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	2.0V-1.5V Sensitivity Variation less than 3dB

3.9 Typical Frequency Response Curve



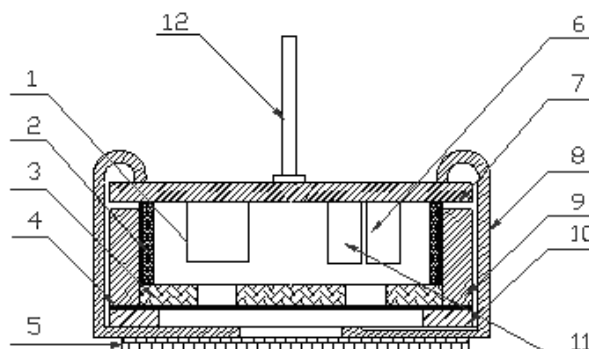
3.10 Schematic Diagram:



RL=2.2kΩ
Vs=2.0V

4 Mechanical Specifications:

4.1 Drawing



No.	Name	Number
1	FET(RF2123B/C)	1
2	Cooper ring	1
3	Back plate	1
4	Insulatin spacer	1
5	Cloth	1
6	Chip capacitor	1
7	PCB	1
8	Case	1
9	Base	1
10	D/P	1
11	Chip Capacitor	1
12	PIN	2

4.2	Accessory Drawing of MIC: Unmarked tolerance is ± 0.15(mm)	
		
4.3	Weight	0.05g
5.Reliability Tests: After any following tests, the sensitivity of the microphone unit shall not change more than ± 3 dB from initial value, and shall keep their initial operation and appearance.		
5.1	Hi-Temp. Test	The microphone unit must be subjected to $+70^{\circ}\text{C}$ for 240 Hours, and expose to room temperature for 3 Hours.
5.2	Low-Temp. Test	The microphone unit must be subjected to -20°C for 240 Hours, and expose to room temperature for 3 Hours.
5.3	Humi.&Heat Test	The microphone unit must be subjected to $+70^{\circ}\text{C}$, 93% RH-for 240 Hours, and expose to room temp for 3 Hours .
5.4	Thermal Shocking Test	The microphone unit must be subjected to a environment from -20°C for 30 minutes to the end of $+70^{\circ}\text{C}$ for 30 minutes, which shall be repeated 32 cycles and exposed to room temperature for 3 hours .
5.5	Vibration Test	The microphone unit must be subjected to a procedure that after vibrating for two hours from each of the two directions with a frequency of 10-55Hz and a 1.52mm-high amplitude.
5.6	Dropping Test	The microphone unit must be subjected to a procedure that after dropping to a slippery marble floor for 5 times from a 1.5-meter-high without package.
5.7	Tension Test	The microphone unit must be subjected to a procedure that after adding a pulling strength of 6N to any of the microphones with wires for one minute with no any breaking.
5.8	Static Electricity Destruction	<p>According to the third item of the standard of IEC61000</p> <p>1.Contact discharge Charge 6000v DC to the capacitor with 150pF, and discharge the output of the MIC ten times through the resistance of 330Ω , then check and test it.</p> <p>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 330Ω , then check and test it.</p>
6	Environmental Condition:	
6.1	Storage Condition	$-40^{\circ}\text{C}\sim+70^{\circ}\text{C}$ R.H. less than 90%
6.2	Operation Condition	$-20^{\circ}\text{C}\sim+60^{\circ}\text{C}$ R.H. less than 90%
7	Notes:	
	<ol style="list-style-type: none"> Operators, the solder fixture and the soldering iron must be statically grounded under each soldering process. 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. Always Avoid bringing pinholes on the soldering terminal during the operation to the omni-directional microphones. 	