



# HITPOINT

**SPECIFICATION**

**PRODUCT TYPE: PMOF-6027SN-42KDO**  
(RoHS)

DSND BY		
CHKD BY		
APVD BY		

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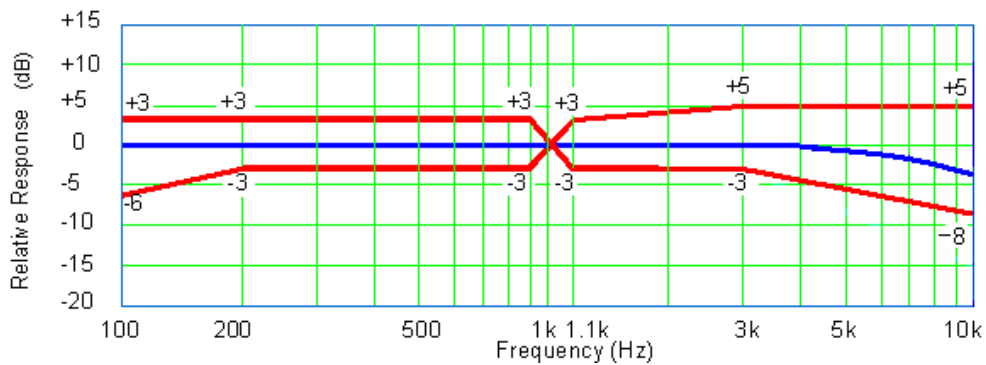
1 **Name: Omnidirectional Electret Condenser Microphone**

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

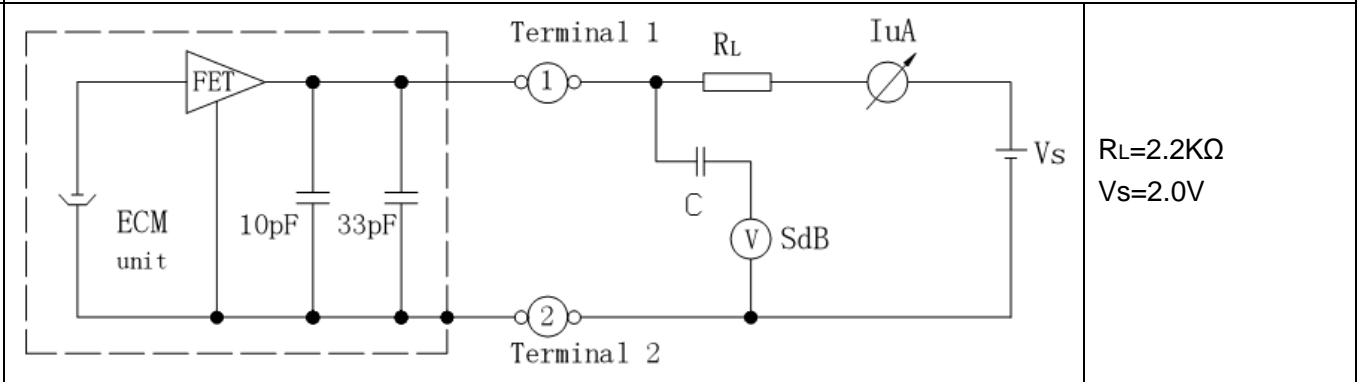
3 **Electrical Specifications:**

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**

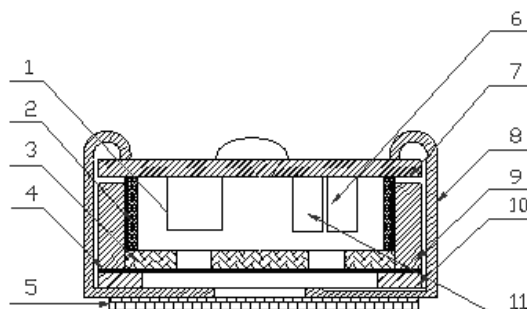


**3.10 Schematic Diagram:**

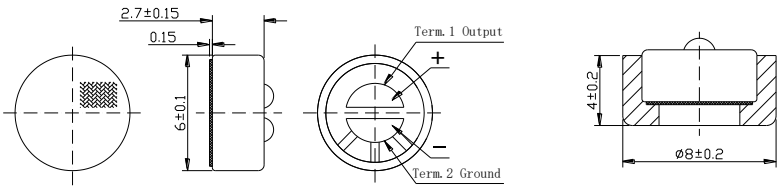


**4 Mechanical Specifications:**

**4.1 Drawing**



No.	Name	Number
1	FET	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

4.2	<b>Accessory Drawing of MIC: Unmarked tolerance is <math>\pm 0.15</math>(mm)</b>	
		

4.3	<b>Weight</b>	0.05g
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**5. Reliability Tests:** After any following tests, the sensitivity of the microphone unit shall not change more than  $\pm 3$ 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 $-20^{\circ}\text{C}$ 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 $-20^{\circ}\text{C}$ 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 <math>330\ \Omega</math> , 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 <math>330\ \Omega</math> , 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:**

- 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.