



# SPECIFICATION

**PRODUCT TYPE:** IP4 防水 **OF9767L-2A383**

**Engineering No.:**

**Customer Material Code:**

**Customer Type:**

DSND BY		
CHKD BY		
APRVD BY		

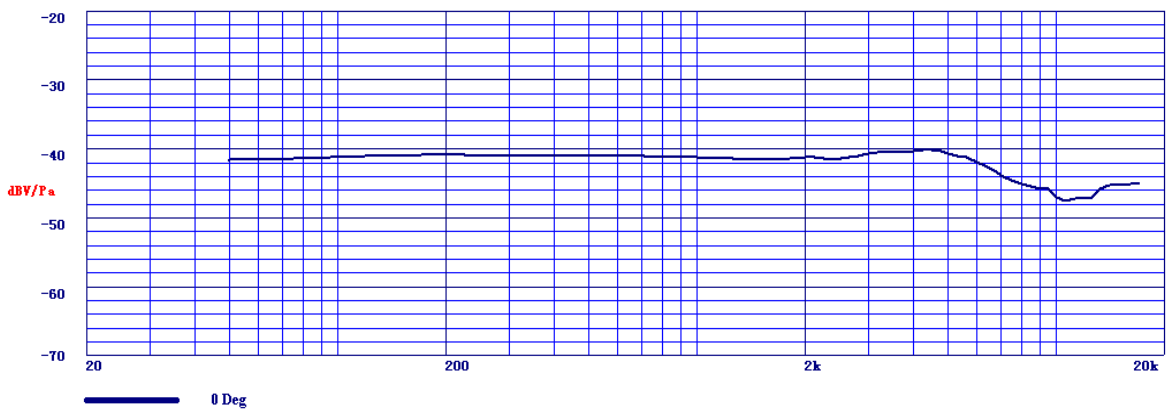
1 **Name: Omnidirectional Electret Condenser Microphone (Foil Electret Type)**

2 **TYPE: OF9767L-2A383**

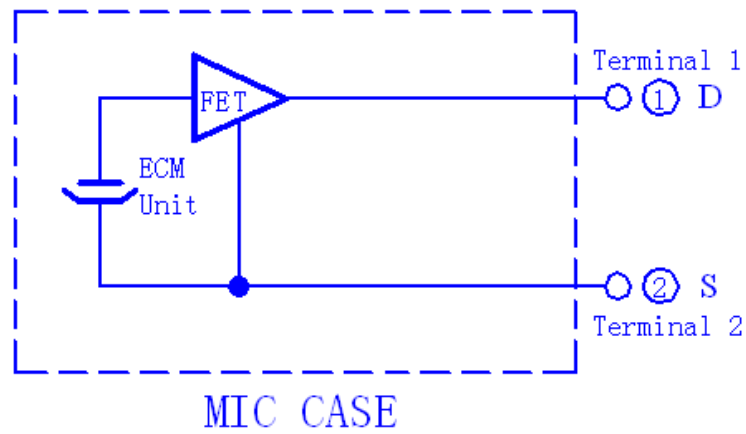
3 **Electrical Specifications:**

3.1	Sensitivity Range	-38±3dB $R_L=2.2K \Omega$ $V_s=4.5V$ (1KHz 0dB=1V/Pa)
3.2	Impedance	Max. 2.2K $\Omega$ 1KHz ( $R_L=2.2K \Omega$ )
3.3	Frequency	50-16000Hz
3.4	Current Consumption	Max.0.5mA $R_L=2.2K \Omega$ $V_s=4.5V$
3.5	Operation Voltage Range	1.0V-10V(DC)
3.6	Max. Sound Pressure Level	More than 120dB S.P.L (1KHz, THD<3%)
3.7	S/N Ratio	More than 58dB (1KHz 0dB=1V/Pa, A Weighted)
3.8	Sensitivity Reduction	2.0V-1.5V Sensitivity Variation less than 3dB

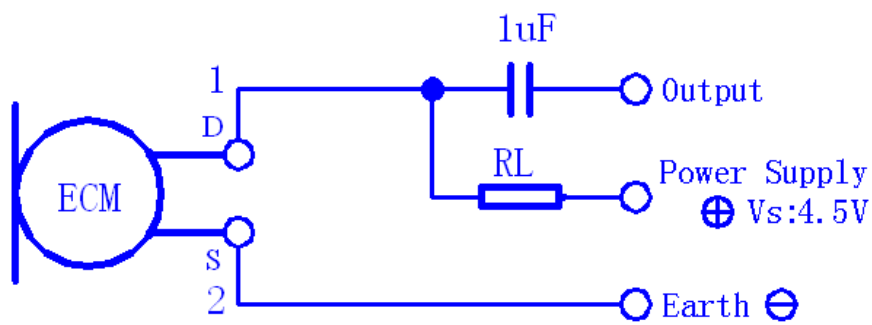
3.9 **Typical Frequency Response Curve: B&K2012 50cm**



3.10 **Microphone Circuit Diagram:**



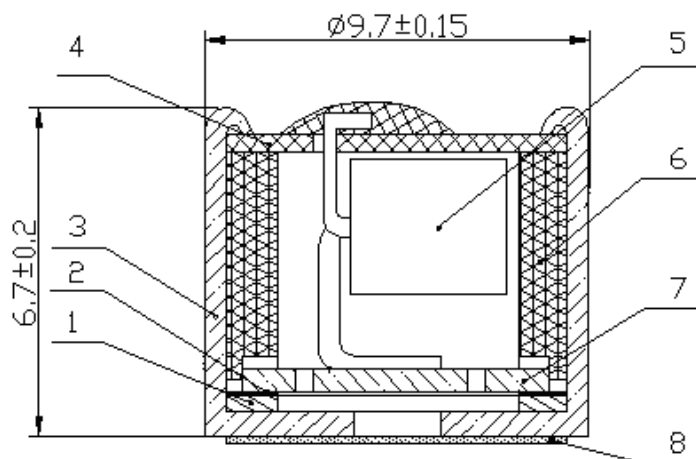
**3.11 Schematic Measuring Diagram:**



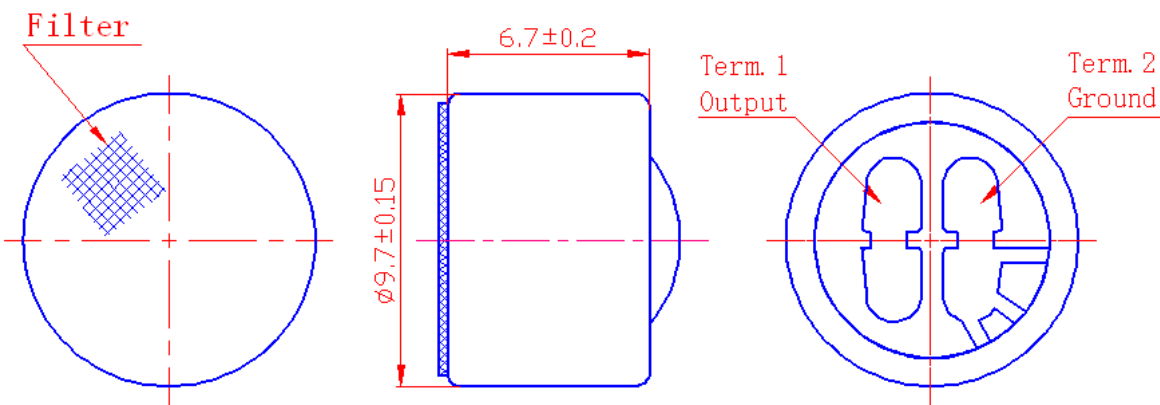
RL:2.2KΩ (external resistance)

**4 Mechanical Specifications:**

**4.1 Drawing**



8	FELT	1	
7	ELECTRET BOARD	1	
6	INNER HOUSING	1	
5	F. E. T	1	
4	P. C. B	1	
3	CASE	1	
2	SPACER	1	
1	POLARIZED DIAPHRAGM	1	

4.2	<b>Dimension (mm):</b>  	
4.3	<b>Weight</b>	0.8g
4.4	<b>Mechanical Intensity</b>	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	<b>Hi-Temp. Test</b>	The microphone unit must be subjected to $+70\text{ }^{\circ}\text{C}$ for 48 Hours, and expose to room temperature for 3 Hours.
5.2	<b>Low-Temp. Test</b>	The microphone unit must be subjected to $-25\text{ }^{\circ}\text{C}$ for 48 Hours, and expose to room temperature for 3 Hours.
5.3	<b>Humi.&amp;Heat Test</b>	The microphone unit must be subjected to $+60\text{ }^{\circ}\text{C}$ , 90% RH-for 48 Hours, and expose to room temp for 3 Hours .
5.4	<b>Humidity Shocking Test</b>	The microphone unit must be subjected to following conditions ( $+50\text{ }^{\circ}\text{C}$ 1H-room temp 1H; $-10\text{ }^{\circ}\text{C}$ 1H-room temp 1H) at 5 cycle, and expose to room temp for 3 Hours.
5.5	<b>Vibration Test</b>	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	<b>Dropping Test</b>	The microphone unit must be subjected to a procedure that after dropping to a slippery marble floor for 5 times from a 1-meter-high without package.
5.7	<b>ESD Test</b>	The microphone under test must be discharged between each ESD exposure (contact : $\pm 4\text{KV}$ , air : $\pm 8\text{KV}$ ) There is no interference in operation after 10 times exposure.

**6 Environmental Condition:**

6.1	<b>Storage condition</b>	$-40\text{ }^{\circ}\text{C}\sim+70\text{ }^{\circ}\text{C}$ R.H. less than 90%
6.2	<b>Operation condition</b>	$-40\text{ }^{\circ}\text{C}\sim+110\text{ }^{\circ}\text{C}$ 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 <math>320^{\circ}\text{C} \pm 10^{\circ}\text{C}</math> . Soldering time should not exceed 2 Seconds.</p> 