paXive

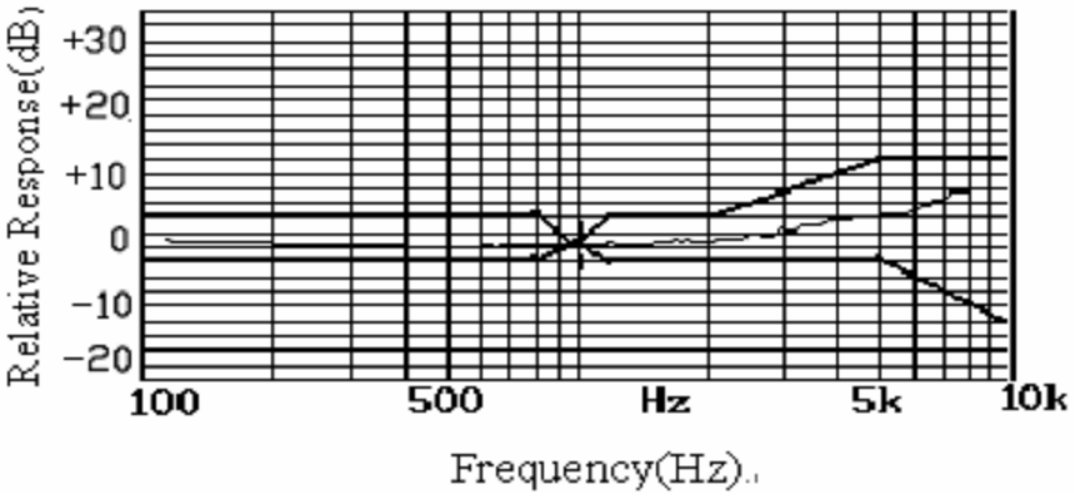
SPECIFICATION

PRODUCT TYPE: **750CM010**

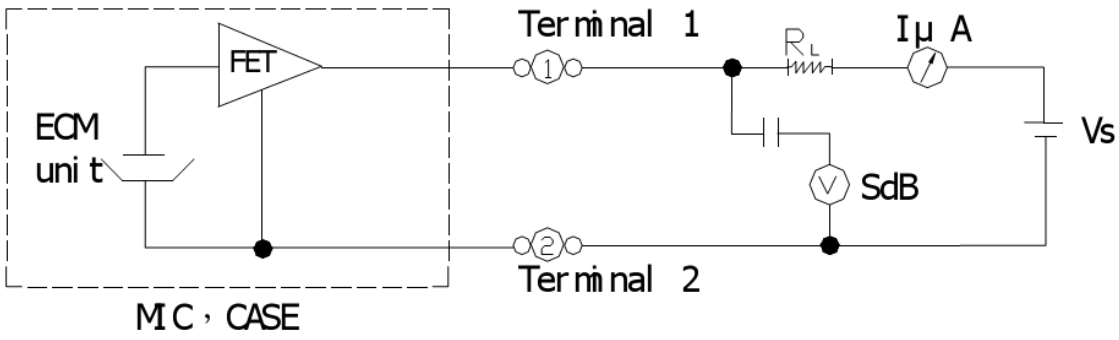
DSND BY		
CHKD BY		
APVD BY		

1	**Name：Omnidirectional Electret Condenser Microphone (Foil Electret Type)**		
2	**TYPE：750CM010**		
3	**Electrical Specifications:**		
	3.1	**Sensitivity Range**	-40±2dB RL=2.2KΩ Vs=4.5V (DC) (1KHz 0dB=1V/Pa)
	3.2	**Impedance**	Max .2.2KΩ 1KHz (RL=2.2KΩ)
	3.3	**Frequency**	100-16000 Hz
	3.4	**Current Consumption**	Max.0.5mA RL=2.2KΩ Vs=4.5V (DC)
	3.5	**Operation Voltage Range**	1.0V-10V
	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-1.5V Sensitivity Variation less than 3dB

3.9 Typical Frequency Response Curve：

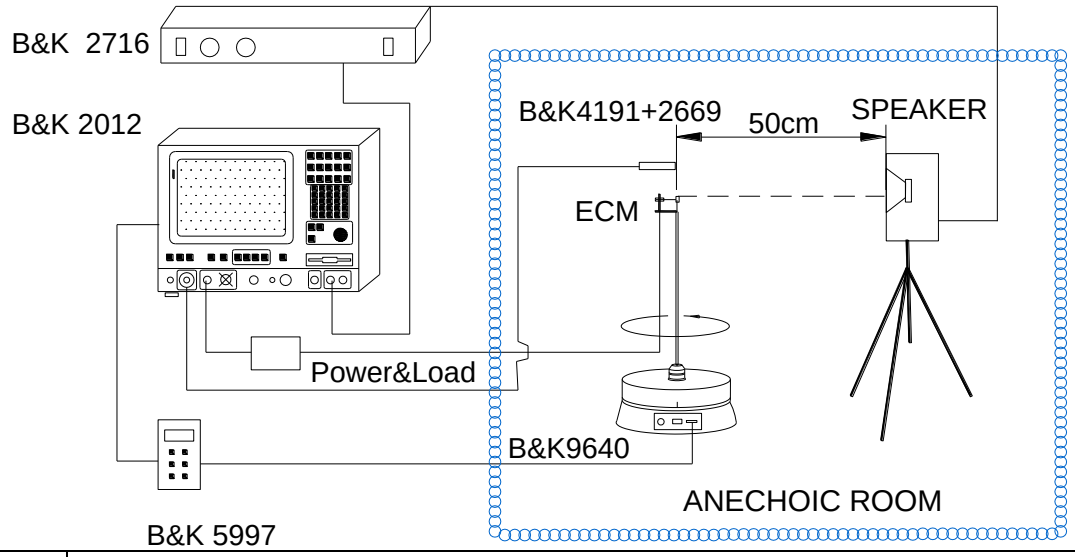


3.10 Schematic Diagram：

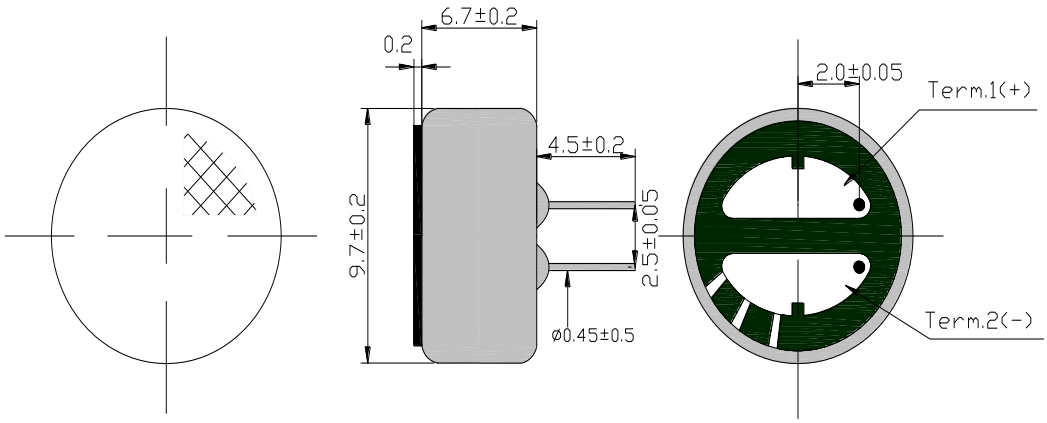


RL=2.2KΩ
Vs=4.5V

4 Test setup Drawing：：



4.2 **Dimension (mm):**



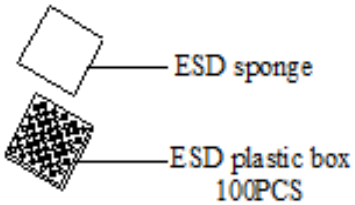
4.3	**Weight**	0.05g

5.Reliability Tests:

After any following tests, the sensitivity of the microphone unit shall not change more than ±3dB from initial value, and shall keep their initial operation and appearance.

5.1	**Hi-Temp. Test**	The microphone unit must be subjected to +70℃ for 240 Hours, and expose to room temperature for 3 Hours.
5.2	**Low-Temp. Test**	The microphone unit must be subjected to -20℃ for 240 Hours, and expose to room temperature for 3 Hours.
5.3	**Humi.&Heat Test**	The microphone unit must be subjected to +70℃, 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℃ for 30 minutes to the end of +70℃ 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**	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 330Ω, 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 330Ω, then check and test it.
6	**Environmental Condition**:		
	6.1	**Storage Condition**	-40℃~+70℃ R.H. less than 90%
	6.2	**Operation Condition**	-20℃~+60℃ R.H. less than 90%
7	**Notes:**		
	7.1	Operators, the solder fixture and the soldering iron must be statically grounded under each soldering process.	
	7.2	The temperature of the soldering irons must be limited as 320℃± 10℃ . Soldering time should not exceed 2 seconds.	
	7.3	Always Avoid bringing pinholes on the soldering terminal during the operation to the omni-directional microphones.	
8	**Packing Specification:**		

	Drawing	Q'ty(pcs)	Size(mm)	Marking
Packing		100	100*100*7	QTY: 100pcs