SPECIFICATION

PRODUCT TYPE： **OF9745P-2A303**

Engineering No.:

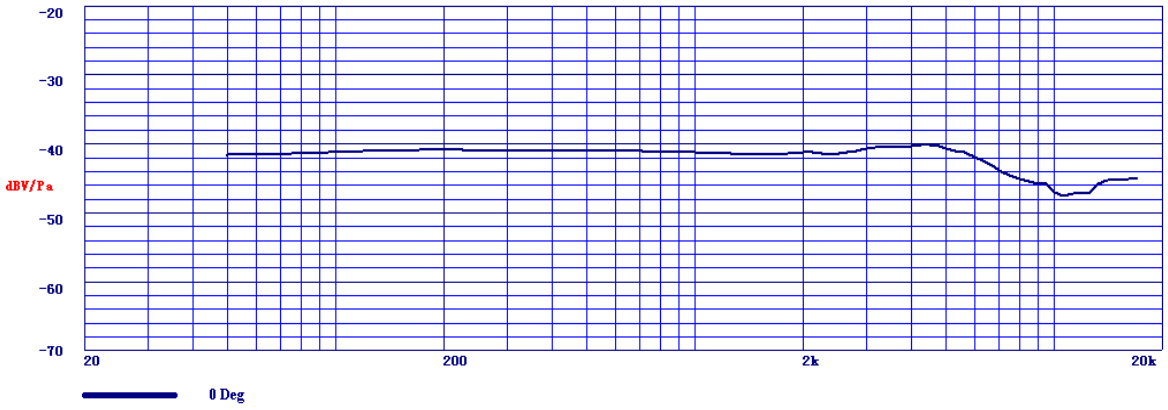
Customer Material Code：

Customer Type:

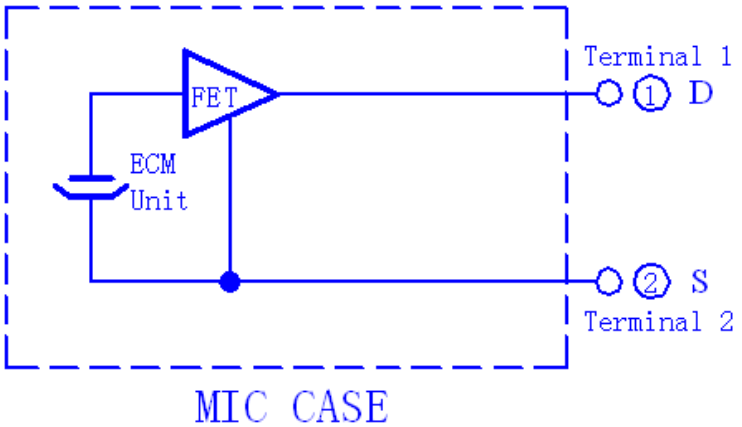
DSND BY		
CHKD BY		
APRVD BY		

1	**Name：Omnidirectional Electret Condenser Microphone (Foil Electret Type)**		
2	**TYPE：OF9745P-2A303**		
3	**Electrical Specifications:**		
	3.1	**Sensitivity Range**	-30±3dB RL=2.2KΩ Vs=4.5V (1KHz 0dB=1V/Pa)
	3.2	**Impedance**	Max: 2.2KΩ 1KHz (RL=2.2KΩ)
	3.3	**Frequency**	50-16000Hz
	3.4	**Current Consumption**	Max.0.5mA RL=2.2KΩ Vs=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 60dB (1KHz 0dB=1V/Pa，A Weighted)
	3.8	**Sensitivity Reduction**	3.0V-2.0V Sensitivity Variation less than 3dB

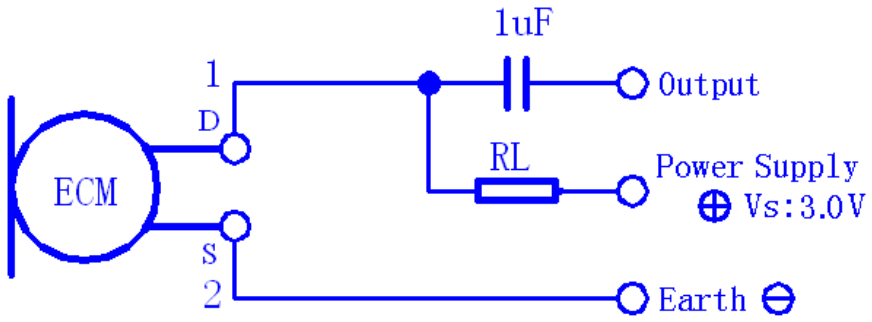
3.9 Typical Frequency Response Curve： B&K2012 50cm



3.10 Microphone Circuit Diagram：



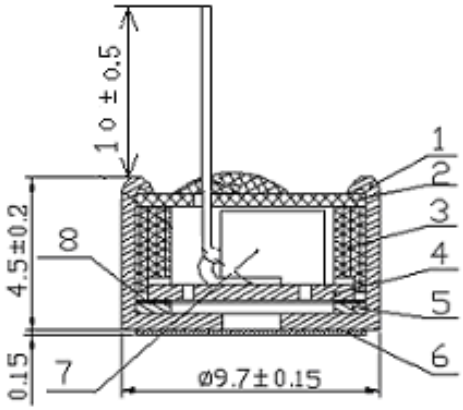
3.11 Schematic Measuring Diagram：



RL:2.2KΩ （external resistance)

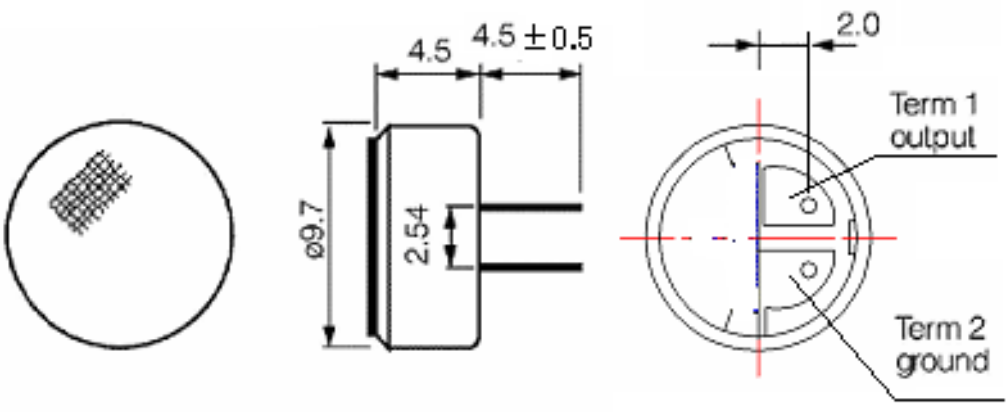
4 Mechanical Specifications：

4.1 Drawing



NO.	NAME	Material	QTY	REMARK
8	SPACER	Polyster film	1	
7	F.E.T		1	
6	WATER-PROOF FELT	Cotton decron textile	1	
5	POLARIZED DIAPHRAGM	Teflon	1	DUPONT
4	ELECTRET BOARD	H62	1	
3	INNER HOUSING		1	
2	P.C.B	Glass fiber	1	
1	CASE	AL	1	

4.2 Dimension (mm):



4.3	Weight	0.8g
4.4	Mechanical Intensity	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 ±3dB from initial value, and shall keep their initial operation and appearance.

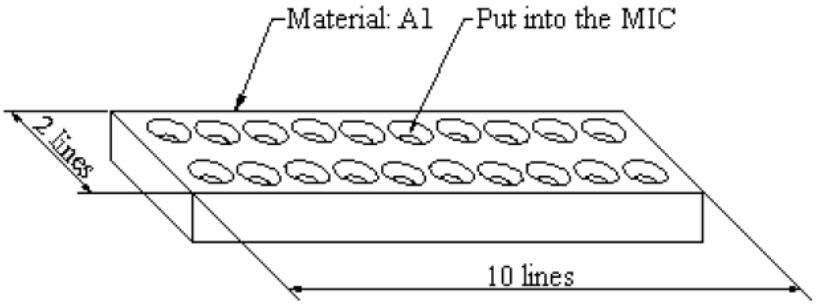
	5.1	**Hi-Temp. Test**	The microphone unit must be subjected to +70℃ for 200 Hours, and expose to room temperature for 3 Hours.
	5.2	**Low-Temp. Test**	The microphone unit must be subjected to -25℃ for 200 Hours, and expose to room temperature for 3 Hours.
	5.3	**Humi.&Heat Test**	The microphone unit must be subjected to +60℃, 90% RH-for 200 Hours, and expose to room temp for 3 Hours .
	5.4	**Humidity Shocking Test**	The microphone unit must be subjected to following conditions (+50℃ 1H-room temp 1H;-10℃ 1H-room temp 1H) at 5 cycle, and expose to room temp 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-meter-high without package.
	5.7	**ESD Test**	The microphone under test must be discharged between each ESD exposure (contact : ±4KV, air: ±4KV) There is no interference in operation after 10 times exposure.

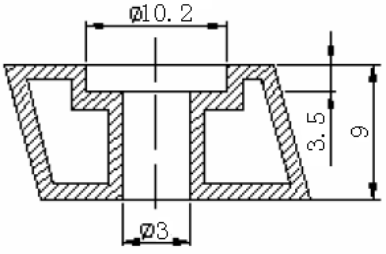
6 **Environmental Condition**:

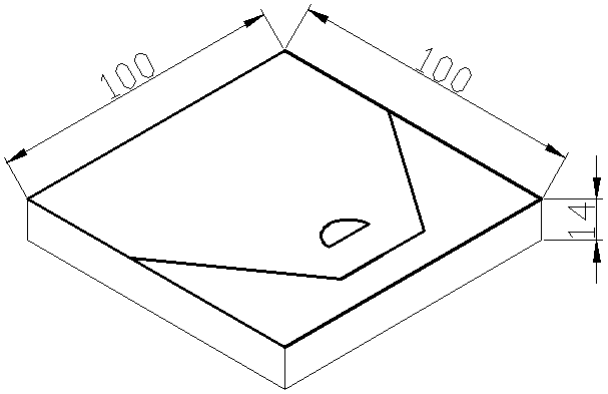
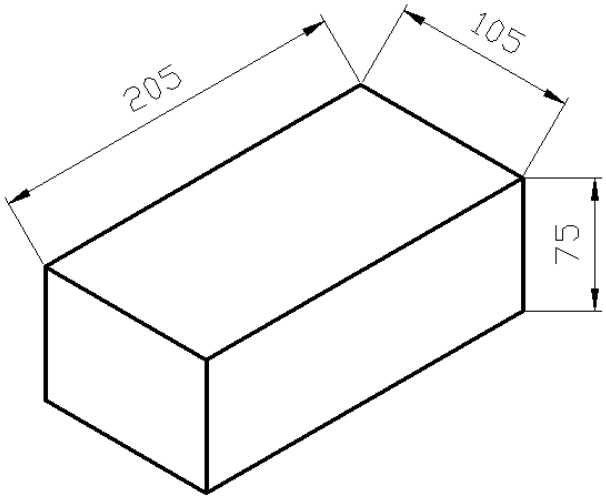
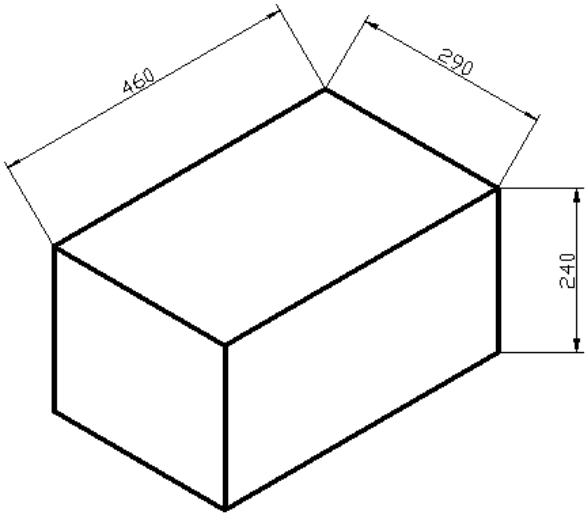
	6.1	**Storage condition**	-40℃~+70℃ R.H. less than 90%
	6.2	**Operation condition**	-40℃~+110℃ R.H. less than 90%
	6.3	**Arbitration condition**	Temperature ：20℃±1℃ Relative humidity：63%~67% Air pressure ：86~106Kpa

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	All the soldering procedures upon microphones must be completed in a metallic device, the temperature of the soldering irons must be limited as 320℃±10℃. Soldering time should not exceed 2 Seconds.





8	Packing Specification:				
		Drawing(Unit: mm)	Qty (pcs.)	Material	Marking
	Packing		100	Paper	
	Middle Box		10×100	Paper	
	Outer Box		20×1000	Paper	Particular for Customer's P.O