

SPECIFICATION

PRODUCT TYPE : OF9745P-2A303

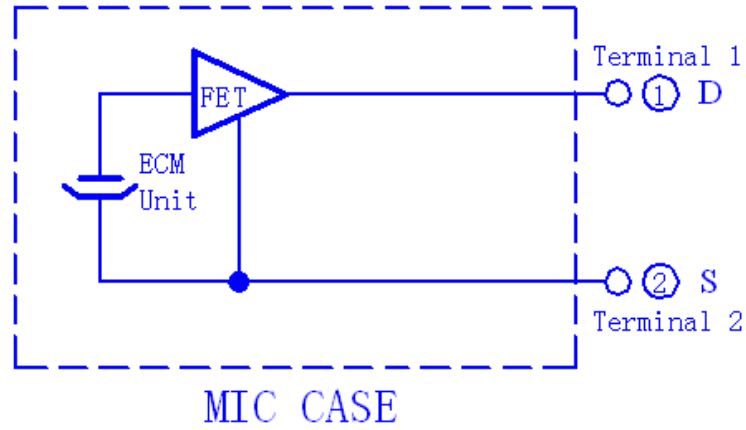
Engineering No.:

Customer Material Code :

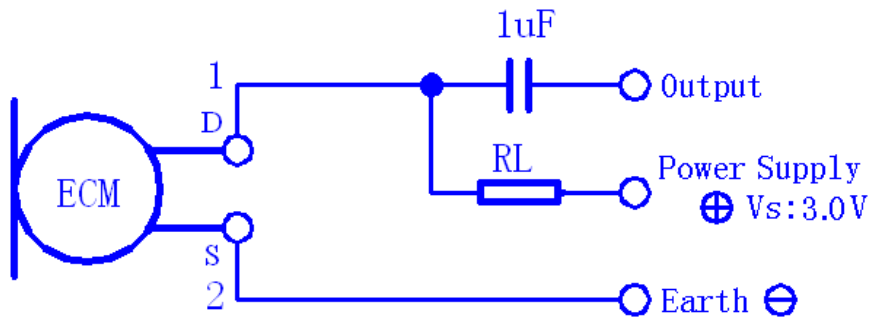
Customer Type:

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 $R_L=2.2K\Omega$ $V_s=4.5V$ (1KHz 0dB=1V/Pa)
3.2	Impedance	Max: 2.2K Ω 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 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 :		



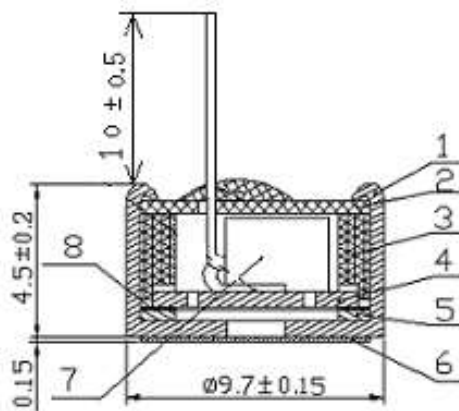
3.11 Schematic Measuring Diagram :



RL:2.2KΩ (external resistance)

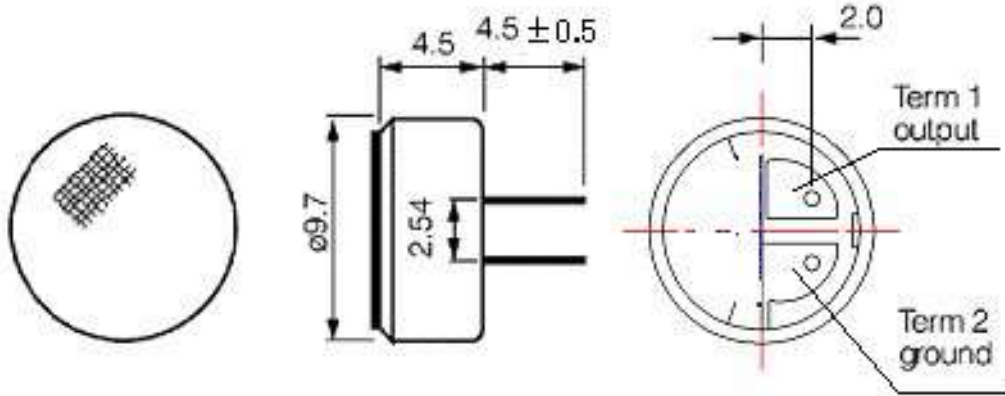
4 Mechanical Specifications :

4.1 Drawing



NO.	NAME	Material	QTY	REMARK
8	SPACER	Polyster film	1	
7	F. E. T		1	
6	WATER-PROOF FELT	Cotton decoron 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.

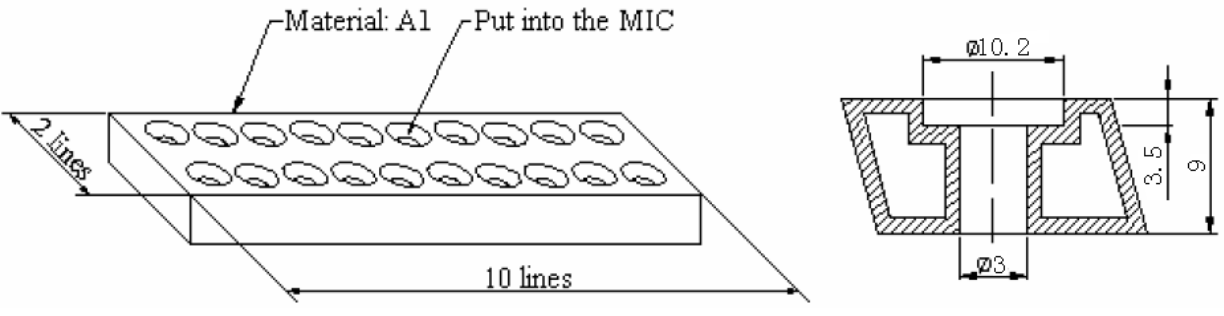


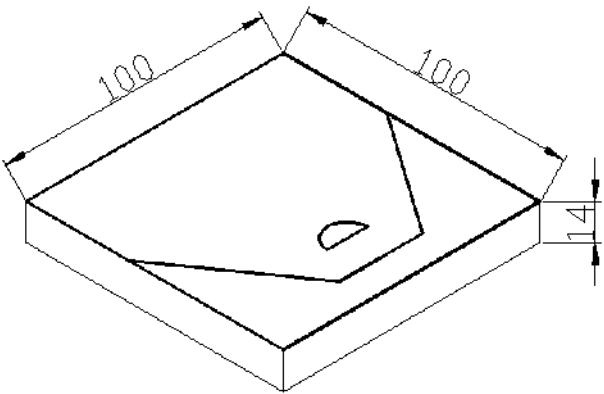
5. Reliability Tests: After any following tests, the sensitivity of the microphone unit shall not change more than $\pm 3\text{dB}$ from initial value, and shall keep their initial operation and appearance.

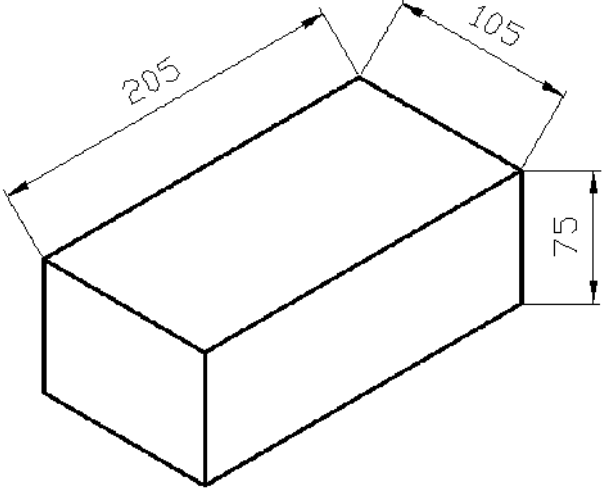
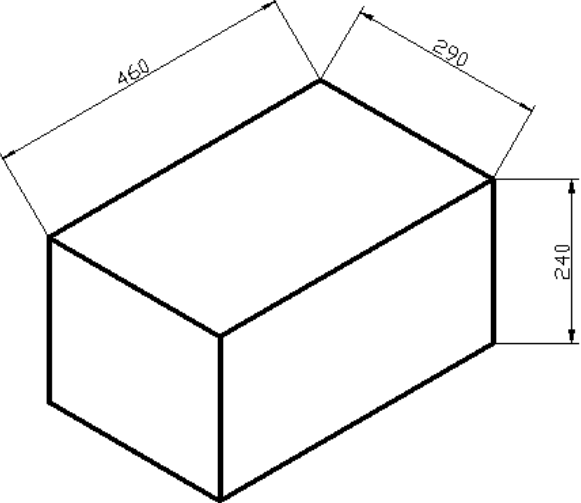
5.1	Hi-Temp. Test	The microphone unit must be subjected to $+70^{\circ}\text{C}$ for 200 Hours, and expose to room temperature for 3 Hours.
5.2	Low-Temp. Test	The microphone unit must be subjected to -25°C for 200 Hours, and expose to room temperature for 3 Hours.
5.3	Humi.&Heat Test	The microphone unit must be subjected to $+60^{\circ}\text{C}$, 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 ($+50^{\circ}\text{C}$ 1H-room temp 1H; -10°C 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 : $\pm 4\text{KV}$, air: $\pm 4\text{KV}$) There is no interference in operation after 10 times exposure.

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	$-40^{\circ}\text{C} \sim +110^{\circ}\text{C}$ 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 $320^{\circ}\text{C}\pm 10^{\circ}\text{C}$. Soldering time should not exceed 2 Seconds.</p> 	

8	Packing Specification:				
	Packing	<p>Drawing(Unit: mm)</p> 	Qty (pcs.) 100	Material Paper	Marking

<p>Middle Box</p>	 <p>A 3D perspective drawing of a rectangular box. The top-left edge is labeled 205, the top-right edge is labeled 105, and the right vertical edge is labeled 75. The box is shown from an isometric view.</p>	<p>10×100</p>	<p>Paper</p>	
<p>Outer Box</p>	 <p>A 3D perspective drawing of a rectangular box. The top-left edge is labeled 460, the top-right edge is labeled 290, and the right vertical edge is labeled 240. The box is shown from an isometric view.</p>	<p>20×1000</p>	<p>Paper</p>	<p>Particular for Customer's P.O</p>