

## SPECIFICATION

TYPE “XL” Electret Condenser Microphone

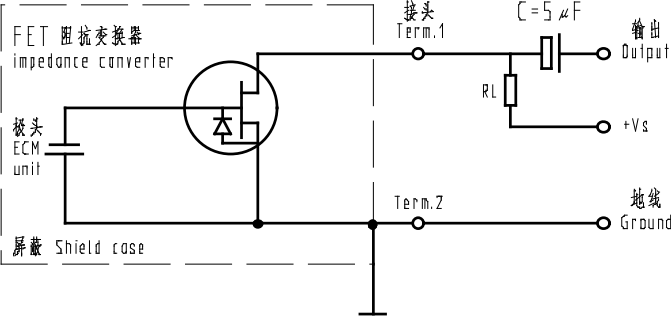
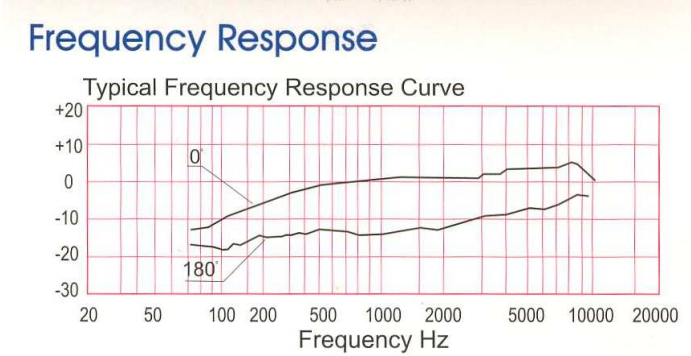
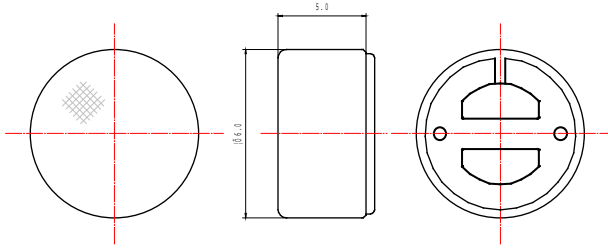
Part No. □EM-B9760UL

1.	Seope	This spccification applies electret condenser microphone (E.C.M)
2.	Model No.	EM-B9760UL
3.	Operation Condition	
3.1	Temperature	-20° - +70°
3.2	Rel,Humidity	35%~85% RH
3.3	Pressure	86~106Kpa
3.4	Environmental Noise	36dB (Maximum)
3.5	Operation Voltage	1~10VDC
3.6	Earth	
4.	Electrical Characteristics	
4.1	Standard Operation Voltage	4.5VDC
4.2	Impedance	Less than 2.2KΩ
4.3	Current Consumption	0.5mA (Maximum)
4.4	Sensitivity	-50dB±3dB(0dB=1V/Pa,1KHz) Vs=4.5V R1=2.2KΩ
4.5	Directivity	Unidirectional
4.6	S/N Ratio	56dB(Minimum)

WRTN	CHKD	APVD	DESCRIPTION

TYPE □“XL” Electret Condenser Microphone

Part No. □EM-B6050UL

<p>4.7</p>	<p>Schematic Diagram</p> <p><math>V_s = 1.5V</math></p> <p><math>R_1 = 680\Omega</math></p> <p><math>C = 1\mu F</math></p>	
<p>4.8</p>	<p>Test Temperature</p> <p>Rel.Humidity</p>	<p><math>20^\circ \pm 2</math></p> <p>45%~65% RH</p>
<p>4.9</p>	<p>Frequency Response</p>	
<p>5.</p>	<p>Mechanical Characteristics</p>	<p>5.1</p> <p>Dimension</p> <p>5.2</p> <p>Mass</p> <p>0.35g</p> <p>5.3</p> <p>Dimensional Drawing</p> 

6.	Reliability Tests  The sensitivity to be within $\pm 3\text{dB}$ of initial sensitivity after 3 hours conditioning at $20^\circ\text{C}$ .	
	6.1 Vibration	Frequency1 10Hz~55Hz Amplitude $\pm 0.15\text{mm}$ Frequency2 55Hz~150Hz Acceleration 20m/s Change of Frequency 1octave/min 2 hrs in each of 3 axes
	6.2 Shocks	Pulse Shape Half Sinusoidal Pulse Duration 11ms Acceleration $150\text{m/s}^2$ Number of Jolts 10 in each of 3 axes
	6.3 Dry Heat/Cold	$70^\circ$ for 72hrs $-20^\circ$ for 72hrs
	6.4 Damp Heat	$90\%\text{RH}, +40^\circ\text{C}$ for 120hrs
	6.5 Temperature Cycles	$(2\text{h})(1\text{h})(2\text{h})(1\text{h})(2\text{h})$ 10cycles
7.	Cautions	
	7.1	The soldering copper of a smaller type of less than 20W shall be applied.
	7.2	The temperature of the working surface of the soldering copper shall be below $270^\circ\text{C}$ .
	7.3	E.C.M shall be soldered fixed on the metal block (heat sink) which has the higher Radiation effects heat sink shall contact with each of E.C.M.
	7.4	The soldering time for each terminal shall be 1~2 sec.
	7.5	The pin hole soldering shall be avoided.
	7.6	E.C.M may easily be destroyed by static electricity, and the countermeasure for eliminating static electricity (the ground for soldering copper, for worktable and for human body) shall be executed.