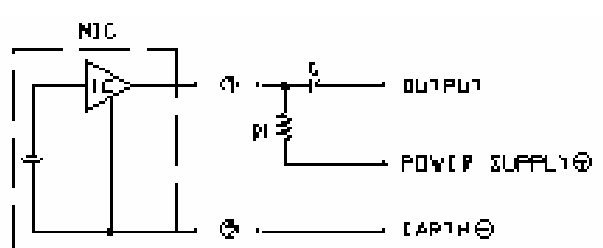
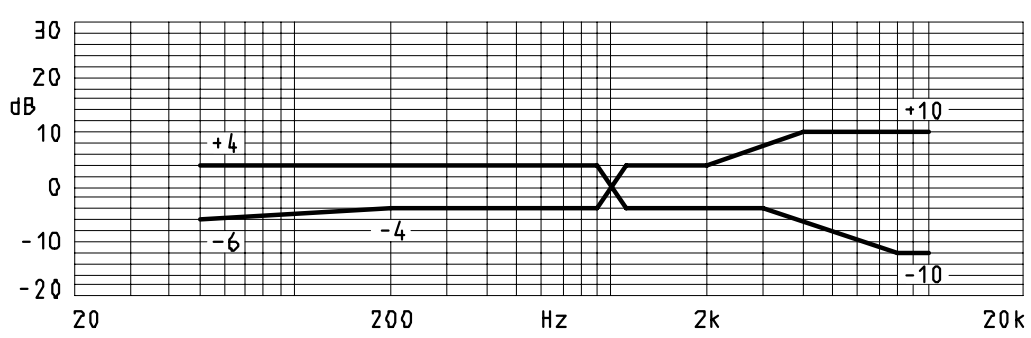
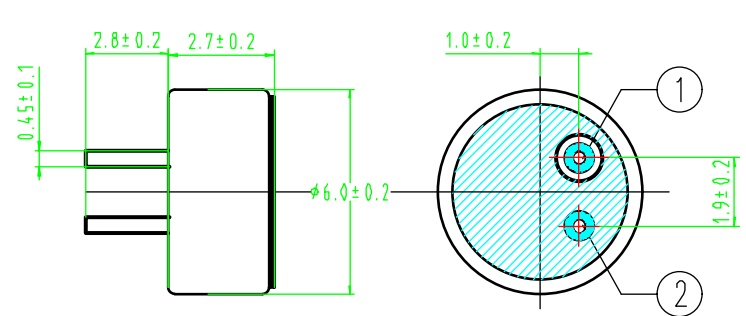


## SPECIFICATION

Type: Electret Condenser Microphone  
 Part No.MWB-6027-OP

1.	Scope	This specification applies electret condenser microphone(E.C.M)
2.	Model No.	MWB-6027-OP
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	+2.0VDC
	4.2 Impedance	2.2k Ω (Maximum)
	4.3 Current Consumption	0.6mA(Maximum)
	4.4 Sensitivity	(0dB=1V/0.1Pa,1KHz) -54dB ~ -66dB
	4.5 Directivity	Omni-directional
	4.6 S/N Ratio	40dB(Minimum)(A-Curve at 1KHz,0.1Pa)
	4.7 Test Temperature Test Rel. Humidity	20℃±2℃ 45%~65%RH
4.8 测试电路图 Schematic Diagram	 <p style="text-align: center;">C=1 μ F R1=2.2k Ω</p>	

4.9 Frequency Response	
	
5.	Mechanical Characteristics
5.1 Dimension	$\phi 6.0 \times 2.7$
5.2 Mass	$\leq 0.6g$
5.3 Dimensional Drawing	
	
5.4 Soldering Heat Shock	To be no interference in operation after soldering heat shock. Temperature $260 \pm 5^\circ\text{C}$ for $5 \pm 1$ seconds.
5.5 Soldering Heat Shock	To be no interference in operation after pulled the terminals with 1kg weight for 1 minute.
6.	Reliability Tests
The sensitivity to be within $\pm 3\text{dB}$ of initial sensitivity after 3 hours of conditioning at $20^\circ\text{C}$ .	
6.1 Vibration Test	Frequency 1    10Hz~55Hz Amplitude $\pm 0.15\text{mm}$ Frequency 2    55Hz~150Hz Acceleration $20\text{m/s}^2$ Change of Frequency 1octave/min 2 hrs in each of 3 axes
6.2 Shocks Test	Pulse Shape     Half Sinusoidal Pulse Duration   11ms Acceleration $150\text{m/s}^2$ Number of Jolts   10 in each of 3 axes



	6.3 Drop Test	To be no interference in operation after dropped to concrete floor each time from 1 meter height at three directions in state of packing.
	6.4 Dry Heat/Cold Test	70°C for 100 hrs    -30°C for 100 hrs
	6.5 Damp Heat Test	90%RH,+40°C for 100 hrs
	6.6 Temperature Cycles Test	-20°C ↔ 70°C (2h) (1h) (2h) 4cycles
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 °C.	
	7.3 E.C.M shall be soldered fixed on the metal block (heat sink) which has the higher radiation effects. Said 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 destroyed by the static electricity, and the countermeasure for eliminating the static electricity (the ground for soldering copper, for worktable and for human body) shall be executed.	

WRTN	CHKD	APVD	DESCRIPTION