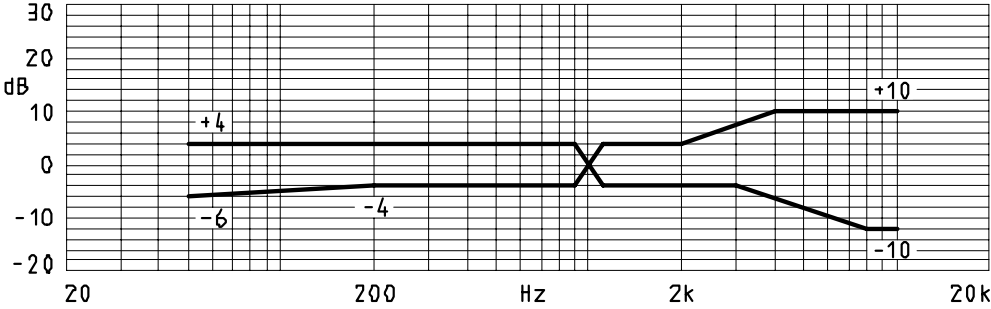
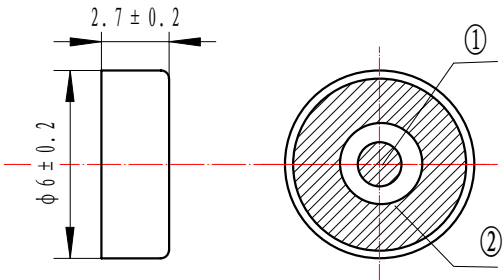


SPECIFICATION

FOR P/N MWB-6027-OM (General)

1.	Scope	This specification applies electret condenser microphone(E.C.M)
2.	Model No.	MWB-6027-OM (General)
3.	Operation Condition	
	3.1 Temperature	-20~+70°C
	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) -62 ± 2dB
	4.5 Directivity	Omni-directional
	4.6 S/N Ratio	40dB(Minimum)(A-Curve at 1KHz, 0.1Pa)
	4.7 Test Temperature	20°C ± 2°C
	Test Rel. Humidity	45%~65%RH
	4.8 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 ± 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°C .													
6.1 Vibration Test	<table border="0"> <tr> <td>Frequency 1</td> <td>10Hz~55Hz</td> </tr> <tr> <td>Amplitude</td> <td>$\pm 0.15\text{mm}$</td> </tr> <tr> <td>Frequency 2</td> <td>55Hz~150Hz</td> </tr> <tr> <td>Acceleration</td> <td>20m/s^2</td> </tr> <tr> <td>Change of Frequency</td> <td>1octave/min</td> </tr> <tr> <td colspan="2">2 hrs in each of 3 axes</td> </tr> </table>	Frequency 1	10Hz~55Hz	Amplitude	$\pm 0.15\text{mm}$	Frequency 2	55Hz~150Hz	Acceleration	20m/s^2	Change of Frequency	1octave/min	2 hrs in each of 3 axes	
Frequency 1	10Hz~55Hz												
Amplitude	$\pm 0.15\text{mm}$												
Frequency 2	55Hz~150Hz												
Acceleration	20m/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 150m/s ² Number of Jolts 10 in each of 3 axes
6.3 Drop Test	在包装完整的状况下，从 1 米高度向混凝土地面自由落下，3 个方向各落下 3 次，功能不能有任何影响。 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