

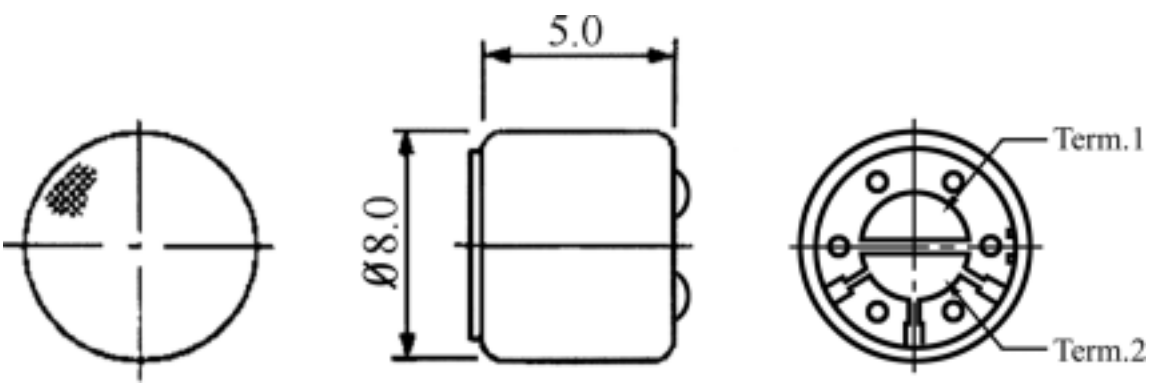
VECO VANSONIC ENTERPRISE CO.,LTD.

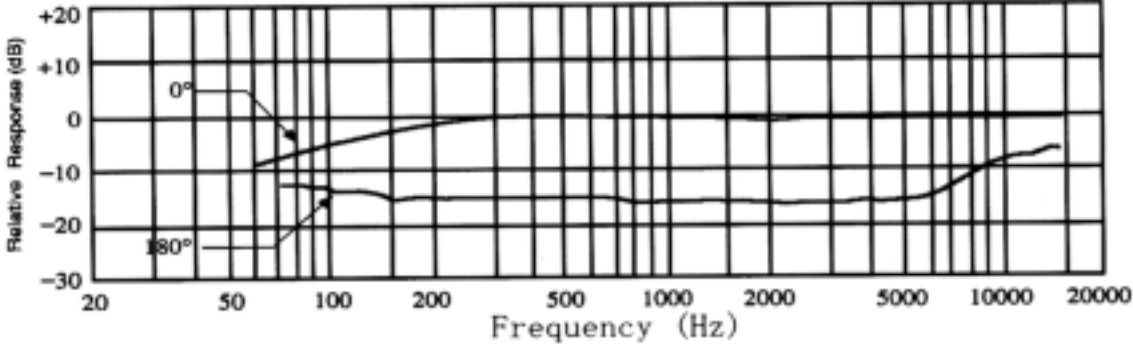
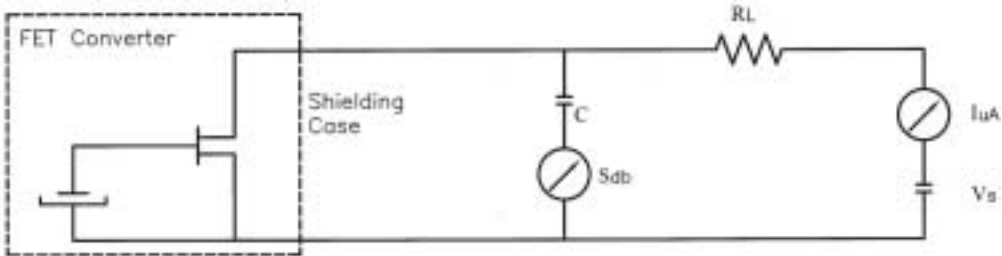
8F., No.7, Lane 16, Sec.2, Szechwan Road, Panchiao, Taipei Hsien, TAIWAN.

E-mail: Vansonics@ms4.hinet.net Homepage: <http://www.vecoco.com.tw>

TEL: +886-2-962 6335

FAX: +886-2-962 5220

1.	適用範圍 Scope	本規格書適用於駐極體電容式麥克風 This specification applies electret condenser microphone
2.	型號 Model No.	VM-8050U-1 ()
3.	試驗條件 Test Condition	
	3-1 標準試驗條件 Standard Test Condition	溫度 / Temperature : 5~35 相對濕度/Rel. Humidity : 45~85%(RH) 氣壓 / Pressure : 86~106KPa
	3-2 判定試驗條件 Judgment Test Condition	溫度 / Temperature : 20±2 相對濕度/Rel. Humidity : 60~70%(RH) 氣壓 / Pressure : 86~106Kpa
4.	規格 Specifications	
	4-1 尺寸 Dimension	8.0x5.0(±0.2)mm
	4-2 FET Model:	NEC 2SK1109
	4-3 指向性 Directivity	Unidirectional (Cardioid)
	4-4 靈敏度 Sensitivity	-50±4dB at L=50cm 0dB=1V/Pa,1KHz
	4-5 尺寸圖 Appearance and Dimension Unit : mm	
	 <p>The technical drawings show three views of the microphone: a top view (left) with a circular shape and a shaded area; a side view (middle) showing a rectangular body with a diameter of 8.0 mm and a length of 5.0 mm; and a bottom view (right) showing the internal structure and two terminals labeled 'Term.1' and 'Term.2'.</p>	
	4-6 負載阻抗 Operating Impedance	0.68K
	4-7 基準電壓 standard Power Supply	1.5V
	4-8 操作電壓 Operating Voltage	D.C 1~10V (Sensitivity Reduction: Within -3dB at 1.0V Compare to 3.0V)
	4-9 頻響特性 Frequency	100-16,000Hz
	4-10 耗電流 Current Consumption	Max. 0.5mA

4-11 信噪比 S/N Ratio	More than 60dB	
4-12 最大輸入聲壓 Max input sound level	120dB SPL	
4-13 周波數特性	<p>Typical Frequency Response Curve</p> <p style="text-align: center;">單一指向性</p> 	
4-14 回路圖	<p>Test Circuit</p> 	
5.	信賴性試驗 Reliability Test	
<p>經過以下所有試驗在 20 的條件下放置 3 小時後，麥克風的靈敏度與試驗前比較變化在± 3dB 以內。</p> <p>After any following tests, the sensitivity of the microphone to be within ±3dB of initial sensitivity after 3hours of conditioning at 20 .</p>		
5-1 振動試驗 Vibration	<p>周波數 1/ Frequency1 : 10Hz~55Hz</p> <p>振幅 / Amplitude : ±0.15mm</p> <p>周波數 2/ Frequency2 : 55Hz~150Hz</p> <p>加速度 /Acceleration : 20m/s²</p> <p>變化 /Change of Frequency : 1 octave/min</p> <p>3 方向，各 2 小時/2 hours in each of 3 axes</p>	
5-2 衝擊試驗 Shocks	<p>脈衝波形 /Pulse shape : half sinusoidal</p> <p>脈衝幅 / Pulse duration : 11ms</p> <p>加速度 /Acceleration : 150m/s²</p> <p>回數 /Number of jolts : 10 in each of 3 axes (5 in positive and 5 in negative direction)</p>	
5-3 高溫試驗/低溫試驗 Dry Heat/Cold	<p>+70 for 72 hours</p> <p>-20 for 72 hours</p>	
5-4 高溫高濕試驗 Damp Heat	<p>90% RH,+40 for 240 hours</p>	

5-5 溫度迴圈試驗 Temperature cycles	-20 ↔ 25 ↔ 70 (2H) (1H) (2H) (1H) (2H) 10 cycles
5-6 熱衝擊試驗 Rapid Temperature Change	Low:-20 , high:+70 放置時間 /Dwell time :30 min 10 cycles 移行時間 /Transfer time (-20~70):30 sec
6 備註 Note	
6-1 動作溫度範圍 Operation Temperature	-20 ~70
6-2 保存溫度範圍 Storage Temperature	-20 ~70
7. 焊接條件 Soldering Condition	
7-1 焊接使用小於 20W 的電烙鐵。 The soldering copper of a small type of less than 20W shall be applied.	
7-2 電烙鐵表面溫度低於 270 。The temperature of the working surface of the soldering copper shall be below 270	
7-3 焊接時把麥克風嵌入散熱能力強的金屬塊內。 ECM shall be soldered fixed on the metal block (heat sink) which has the higher radiation effects said heat sink shall contact with of ECM.	
7-4 焊接時間控制在 3 秒內。 The soldering time for each terminal shall be 3 sec max.	
7-5 焊接後不能出現針孔。 The pinhole after soldering shall be avoided.	
7-6 靜電容易破壞麥克風必須採取措施避免 (電烙鐵接地 , 戴靜電環等。) ECM 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.	
7-7 放熱板形狀 Shape of heat sink 	
7-8 固定部孔形狀 Shape of hole at fixed part 	