

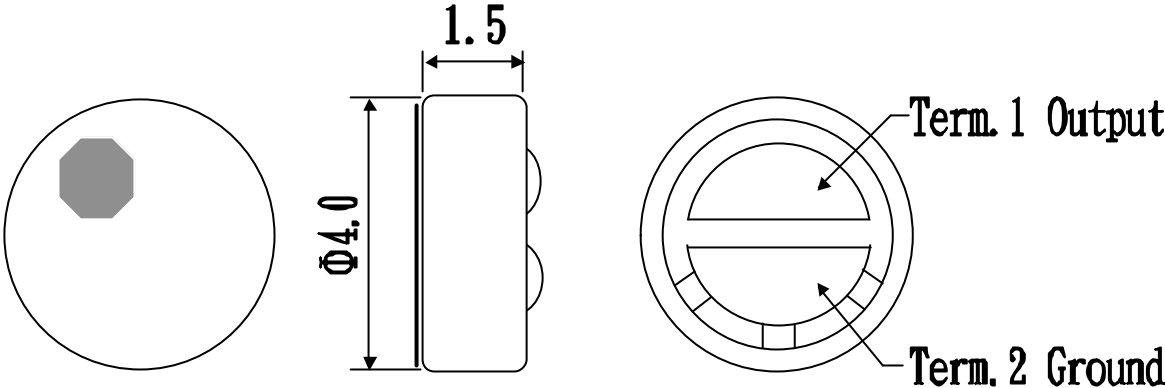
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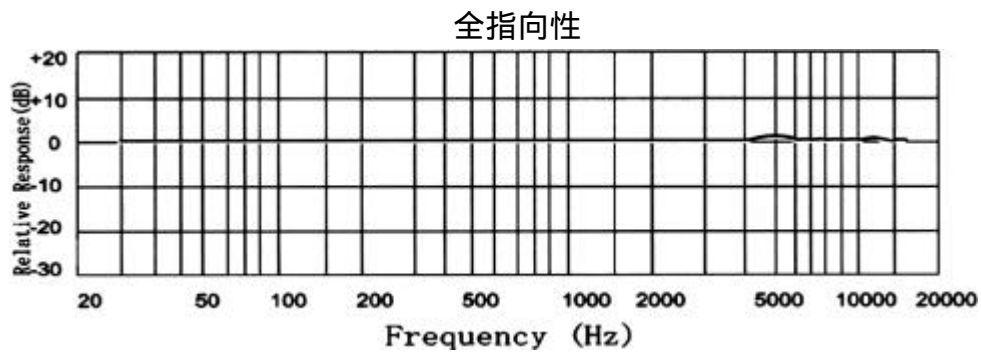
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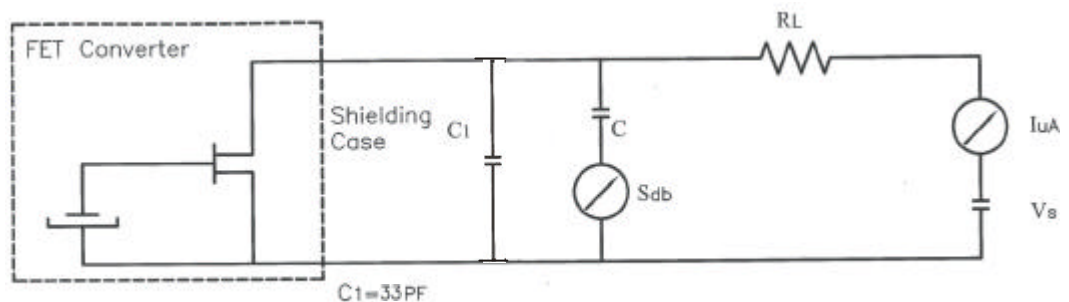
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1.	適用範圍 Scope	本規格書適用於駐極體電容式麥克風 This specification applies electret condenser microphone					
2.	型號 Model No.	VM-4015-3C423					
3.	試驗條件 Test Condition						
	3-1 標準試驗條件 Standard Test Condition	溫度 / Temperature : 5~35 相對濕度/Rel. Humidity : 45~85%(RH) 氣壓 / Pressure : 86~106KPa					
	3-2 判定試驗條件 Judgment Test Condition	溫度 / Temperature : 20 ± 相對濕度/Rel. Humidity : 60~70%(RH) 氣壓 / Pressure : 86~106Kpa					
4.	規格 Specifications						
	4-1 尺寸 Dimension	4.0 x 1.5 (±0.2)mm					
	4-2 FET Model:	SANYO TF-202 / NEC 2SK3367TT					
	4-3 指向性 Directivity	Omni-directional					
	4-4 靈敏度 Sensitivity				V		at L=50cm
		-36 ±dB	-38 ±dB	-40 ±dB	-42 ±dB	-44 ±dB	-46 ±dB
	4-5 尺寸圖 Appearance and Dimension	Unit : mm					
							
	4-6 負載阻抗 Operating Impedance	2.2K					
	4-7 基準電壓 standard Power Supply	2.0V					
	4-8 操作電壓 Operating Voltage	D.C 1~10V (Sensitivity Reduction: Within -3dB at 1.0V Compare to 2.0V)					
	4-9 頻響特性 Frequency	20-16,000Hz					
4-10 耗電流 Current Consumption	Max. 0.5mA						
4-11 信噪比 S/N Ratio	More than 58dB						
4-12 最大輸入聲壓 Max input sound level	110dB SPL						

4-13 周波數特性 Typical Frequency Response Curve



4-14 回路圖 Test Circuit

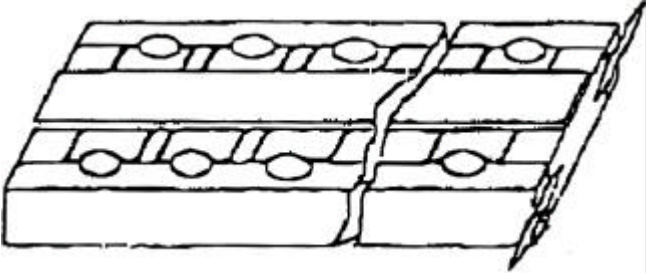


5. 信賴性試驗 Reliability Test

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 $\pm 3\text{dB}$ 以內。

After any following tests, the sensitivity of the microphone to be within $\pm 3\text{dB}$ of initial sensitivity after 3 hours of conditioning at 20 .

5-1 振動試驗 Vibration	周波數 1/ Frequency1 : 10Hz~55Hz 振幅 / Amplitude : $\pm 0.15\text{mm}$ 周波數 2/ Frequency2 : 55Hz~150Hz 加速度 / Acceleration : 20m/s^2 變化 / Change of Frequency: 1 octave/min 3 方向, 各 2 小時/ 2 hours in each of 3 axes
5-2 衝擊試驗 Shocks	脈衝波形 / Pulse shape : half sinusoidal 脈衝幅 / Pulse duration : 11ms 加速度 / Acceleration : 150m/s^2 回數 / Number of jolts : 10 in each of 3 axes (5 in positive and 5 in negative direction)
5-3 高溫試驗/低溫試驗 Dry Heat/Cold	+70 for 72 hours -20 for 72 hours
5-4 高溫高濕試驗 Damp Heat	90% RH, +40 for 240 hours
5-5 溫度迴圈試驗 Temperature cycles	-20 \longleftrightarrow 25 \longleftrightarrow 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 