# **VECU** VANSONIC ENTERPRISE CO.,LTD.

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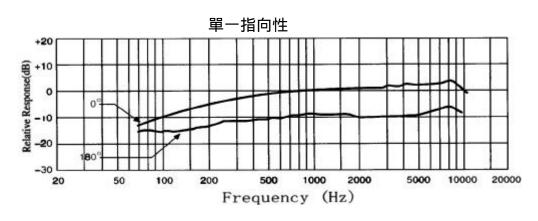
1.	適用範圍	本規格書適用於駐極體電容式麥克風	
	Scope	This specification applies electret condenser microphone	
2.	型號   Model No.	VM-6030U-2P423	
3.	試驗條件 Test Condition		
	3-1 標準試驗條件 Standard Test	温度 / Temperature : 5~35 相對濕度/Rel. Humidity : 45~85%(RH)	
	Condition	氣壓 / Pressure : 86~106KPa	
	3-2 判定試驗條件	温度 / Temperature : 20 <del>2</del>	
	Judgment Test	相對濕度/Rel. Humidity: 60~70%(RH)	
	Condition	氣壓 / Pressure : 86~106Kpa	
4.	規格 Specifications	,	
	4-1 尺寸 Dimension	6.0 x8.0( ±0.2)mm	
	4-2 FET Model:	TF 202/2SK3376TT	
	4-3 指向性 Directivity	Unidirectional (Cardioid)	
	4-4 靈敏度	-42 <b>£</b> dB	
	Sensitivity	at L=50cm 0dB=1V/Pa,1KHz	
	4-5 尺寸圖 Appearar	nce and Dimension Unit: mm	
		Term. 1 Output  Term. 2 Ground	
	4-6 負載阻抗 Operating Impedance	2.2K	
	4-7 基準電壓 standard Power Supply	3.0V	
	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	100-12,000Hz	
	4-10 耗電流 Current Consumption	Max. 0.5mA	
	4-11 信噪比 S/N Ratio	More than 55dB	

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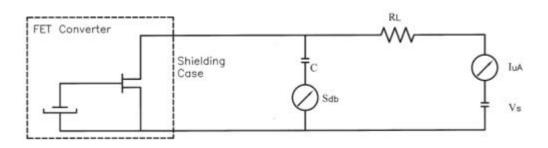
4-12 最大輸入聲壓 Max input sound level

120dB 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±3dB 以內。

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

5-1 振動試驗	周波數 1/ Frequency1 : 10Hz~55Hz
Vibration	振幅 / Amplitude : ±0.15mm
	周波數 2/ Frequency2 : 55Hz~150Hz
	加速度 /Acceleration : 20m/s <sup>2</sup>
	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	脈衝波形 /Pulse shape : half sinusoidal
Shocks	脈衝幅 / Pulse duration : 11ms
	加速度 /Acceleration : 150m/s <sup>2</sup>
	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	+70 for 72 hours
馬魚	-20 for 72 hours
Dry Heat/Cold	
5-4 高溫高濕試驗	000/ PH 140 for 240 hours
Damp Heat	90% RH,+40 for 240 hours
5-5 温度迴圈試驗	-20 <b>4 2</b> 5 <b>7</b> 0
Temperature cycles	(2H) (1H) (2H) (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
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
	Rapid Temperature Change  備註 Note 6-1 動作溫度範圍 Operation Temperature 6-2 保存溫度範圍

# 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.

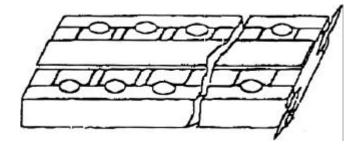
### 7-5 焊接後不能出現針孔。

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

