

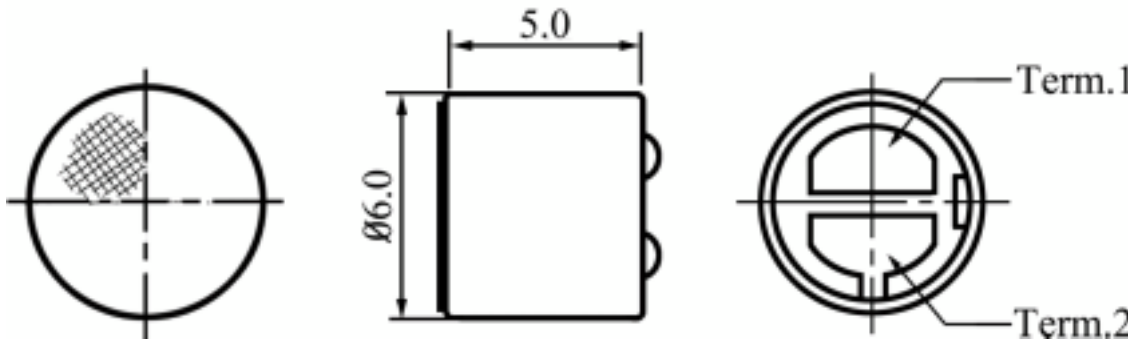
VECO *VANSONIC ENTERPRISE CO., LTD.*

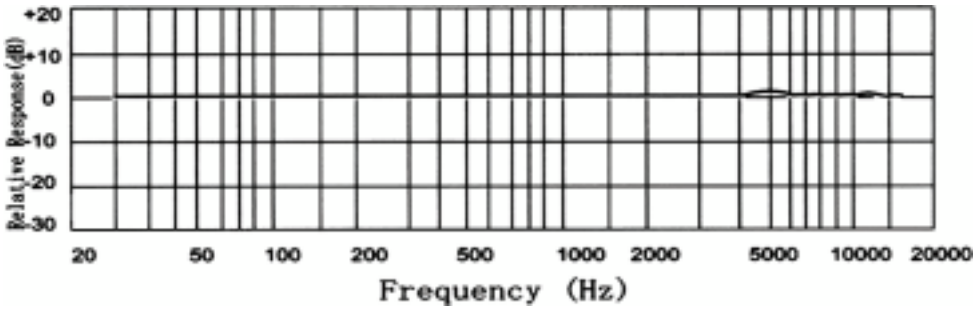
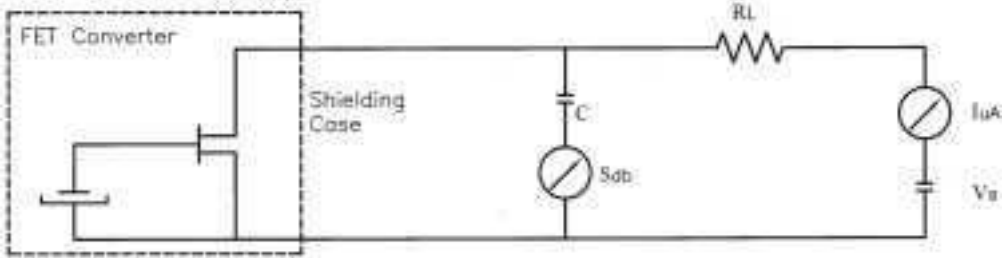
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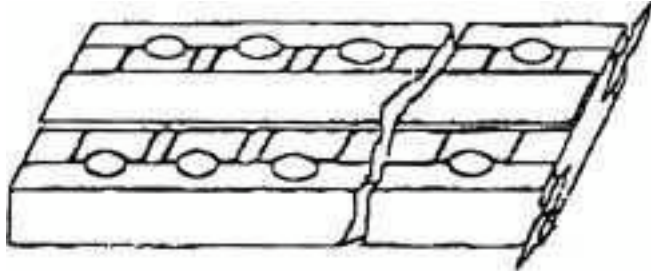
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1.	Scope	This specification applies electret condenser microphone						
2	Model No.	VM-6050-1 ()						
3.	Test Condition							
	3-1 ... Standard Test Condition	Temperature : 5~35 C Rel. Humidity : 45~85%(RH) Pressure : 86~106KPa						
	3-2 Judgment Test Condition	Temperature : 20 +- 2 C /Rel. Humidity : 60~70%(RH) Pressure : 86~106Kpa						
4.	Specifications							
	4-1 Dimension	6.0 ; 5.0 (; 0.2)mm						
	4-2 FET Model:	NEC 2SK1109						
	4-3 Directivity	Omni-directional						
	4-4 Sensitivity							at L=50cm
		-36 ; 3dB	-38 ; 3dB	-40 ; 3dB	-42 ; 3dB	-44 ; 3dB	-46 ; 3dB	0dB=1V/Pa, 1KHz
	4-5	Appearance and Dimension					Unit ; gmm	
								
	4-6 Operating Impedance	2.2K						
	4-7 standard Power Supply	3.0V						
4-8 Operating Voltage	D.C 1~10V (Sensitivity Reduction: Within -3dB at 1.0V Compare to 3.0V)							
4-9 Frequency	20-20,000Hz							
4-10 Current Consumption	Max. 0.5mA							

	4-11 S/N Ratio	More than 60dB
	4-12 Max input sound level	120dB SPL
	4-13 Typical Frequency Response Curve 	
	4-14 Test Circuit 	
5.	Reliability Test	
	3dB After any following tests, the sensitivity of the microphone to be within ± 3 dB of initial sensitivity after 3hours of conditioning at 20 C	
	5-1 Vibration	Frequency1 : 10Hz~55Hz Amplitude : ± 0.15 mm Frequency2 : 55Hz~150Hz Acceleration : 20m/s^2 Change of Frequency : 1 octave/min /2 hours in each of 3 axes
	5-2 Shocks	/Pulse shape half sinusoidal / Pulse duration : 11ms /Acceleration : 150m/s^2 /Number of jolts : 10 in each of 3 axes (5 in positive and 5 in negative direction)
	5-3 Dry Heat/Cold	+70C for 72 hours -20 C for 72 hours
	5-4 Damp Heat	90% RH,+40 C for 240 hours
	5-5 Temperature cycles	-20C \longleftrightarrow 25C \longleftrightarrow 70 C (2H) (1H) (2H) (1H) (2H) 10 cycles

	5-6 Rapid Temperature Change	Low:-20C high:+70 C /Dwell time :30 min 10 cycles /Transfer time (-20~70):30 sec
6		
	6-1 Operation Temperature	-20C ~70 C
	6-2 Storage Temperature	-20C ~70 C
7.	Soldering Condition	
	7-1	20W The soldering copper of a small type of less than 20W shall be applied.
	7-2	270 C The temperature of the working surface of the soldering copper shall be below 270 C
	7-3	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	The soldering time for each terminal shall be 3 sec max.
	7-5	The pinhole after soldering shall be avoided.
	7-6	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	Shape of heat sink 
	7-8	Shape of hole at fixed part 