

# **PRODUCT SPECIFICATION**

Doc: MB6022ASC-1L

This specification applies to the electret condenser microphone outlined within this document.

Model Number: MB6022ASC-1L

#### I. Electrical Characteristics Test Condition (Vs= 2.0 V, RL= 2.2 k ohm, Ta=20°C, RH=65%)

ITEM	SYMBOL	TEST CONDITION	MINIMUM	STANDARD	MAXIMUM	UNITS
Sensitivity	S	f=1kHz, Pin=1Pa	-45	-42	-39	dB 0dB=1V/Pa
Impedance	Zout	f=1kHz, Pin=1Pa			2.2	kΩ
Directivity				OMNI-DIRECTIONAL		
Current Consumption	I				0.5	mA
S/N Ratio	S/N (A)	f=1kHz, Pin=1Pa A Curve	60			dB
Sensitivity Reduction	ΔS	f=1kHz, Pin=1Pa Vs= 2.0 - 1.5			-3	dB
Frequency Range		2.0 - 1.5		100-10,000		
	99 +1D +3 +3 +3 +3 +3 -1D -20 300 500 1000 2000 3000 5000 10000 Frequency (Hz)					
Schematic Diagram of Circuit	ECM	Capacitor 10pF 33	Term.1	C Output		

### **Mechanical Characteristics**

Dimensions	Ø 6 x 2	See Drawing	in Section IV			
Weight	Less than 0.2g					
Solderering Heat Shock	To be no interferance in operation after soldering temperature exposure at 330°C +/-10°C for 2 +/- 0.5 seconds.					
Terminal Mechanical Strength	To be no interference in operation after pulling terminal 0.5kg force for 1 minute					
Absolute Maximum Ratings	Operating Voltage	Storage Temperature Range	Operation Temperature Range			
	Vs (V)	Tstg °C	Tope °C			
	10	-40°C to +85°C	-30°C to +70°C			



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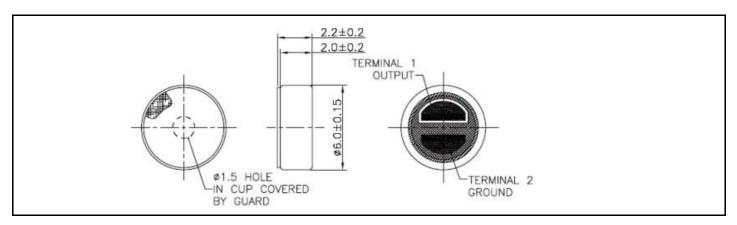
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#### III. Reliability Tests

**Note:** After any of the following tests performed, the sensitivity of the microphone unit shall not deviate more than ±3dB from its initial value. The microphone shall maintain its initial operation and appearance. Measurements for tests with thermal requirements are to be done after 2hrs of condistioning at 20°C.

Vibration Test	The microphone to have no interferance in operation after vibrations, 10Hz to 55Hz for 1minute full amplitude 1.52mm, for 2 hours at three axises.		
Drop Test	The microphone unit must operate when dropped three times once on each axis from a height of 1m onto a metal plate.		
Temperature Test	High The microphone unit must operate within its sensitivity specifications after subjected to the following conditions: +85°C for 240 hrs, and exposed to room temperature for 2 hrs.		
	Low The microphone unit must operate within its sensitivity specifications after subjected to the following conditions: -40°C for 240 hrs, and exposed to room temperature for 2 hrs.		
Humidity Test	+60°C at 95%RH for 240 hrs		
Temperature Cycle Test	After exposure at -40°C for 45 minutes, at+20°C for 10 minutes, at +85°C for 45 minutes, at +20°C for 10 minutes, 27 cycles. (The measurement to be done after 2 hrs of conditioning at +20°C.)		

## IV. Dimensional Drawing



#### V. Other

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