

# **PRODUCT SPECIFICATION**

Doc: MB6015ASC-1

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

Model Number: MB6015ASC-1

# 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	1				0.4	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				100-10,000		Hz
	100 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 3 4 5 6788 2 3 1k ERTOJIENCY (Lv)	4 5 6759 10k			
Schematic Diagram of Circuit	ECM Lunit	Capacitor 10pF 33	Term.1	C Output		

### II. Mechanical Characteristics

Dimensions	Ø 6 x 1	I.5 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 below 2 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	-25°C to +60°C			



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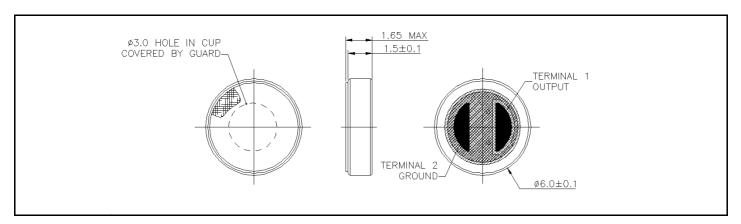
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#### III. Reliability Tests

**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 1.5m 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 30 minutes, at +20°C for 10 minutes, at +85°C for 30 minutes, at +20°C for 10 minutes, 5 cycles. (The measurements to be done after 2hrs of conditioning at +20°C)		

### IV. Dimensional Drawing



#### V. Other

Better Shielded, RF noise resistant type.

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