

PRODUCT SPECIFICATION

Doc: MB6013ABC-2

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

Model Number: MB6013ABC-2

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	S f=1KHz, Pin=1Pa		-44	-42	dB 0dB=1V/Pa
Impedance	Zout	f=1kHz, Pin=1Pa			2.2	kΩ
Directivity			OMNI-DIRECTIONAL			
Current Consumption	ı				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	100-10,000			Hz
	+20 +10 +10 +3 -10 -3 -3 20 50 100 200 500 1000 2000 5000 10000 20000 Frequency (Hz)					
Schematic Diagram of Circuit	FET impedance converter ECM unit Capacitor 10pF 33pF Term.2 Schield Case Ground					

Mechanical Characteristics

Dimensions	Ø 6 x	1.3 See	Drawing in	n Section IV			
Weight	Less than 0.2g						
Solderering Heat Shock	Not Applicable						
Terminal Mechanical Strength	Not Applicable						
Absolute Maximum Ratings	Operating Voltage	Storage Ter Ran		Operation Temperature Range			
	Vs (V)	Tstg	°C	Tope °C			
	1.5-10.0	-40°C to	+85°C	-30°C to +70°C			



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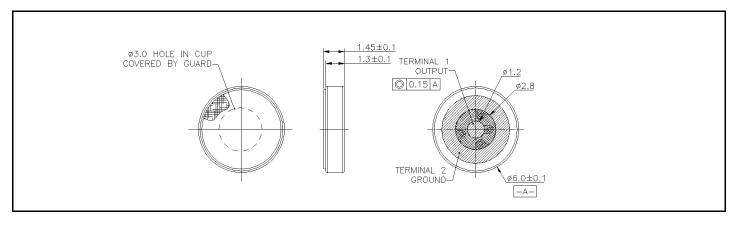
III. Reliability Tests

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.

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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 45 minutes, at +85°C for 45 minutes, 27 cycles. (The measurements to be done after 2hrs of conditioning at +20°C)		

Dimensional Drawing



Other

Better Shielded, RF noise resistant type.

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