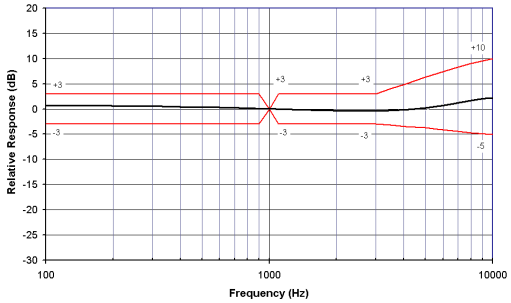
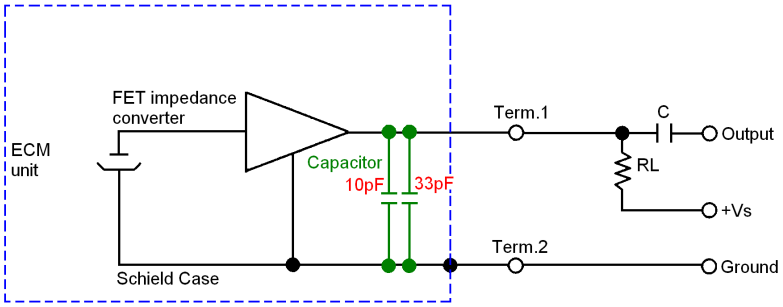
This specification applies to the electret condenser microphone outlined within this document.

Model Number: **MB6022ABC-3**

I. Electrical Characteristics Test Condition (Vs= 3.0 V, RL= 2 k ohm, Ta=20°C, RH=65%)

ITEM	SYMBOL	TEST CONDITION	MINIMUM	STANDARD	MAXIMUM	UNITS
Sensitivity	S	f=1kHz, Pin=1Pa	-47	-45	-43	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	Δ S	f=1kHz, Pin=1Pa Vs= 3.0 - 2.5			-3	dB
Frequency Range			100-10,000			Hz
Frequency Response						
Schematic Diagram of Circuit						

II. Mechanical Characteristics

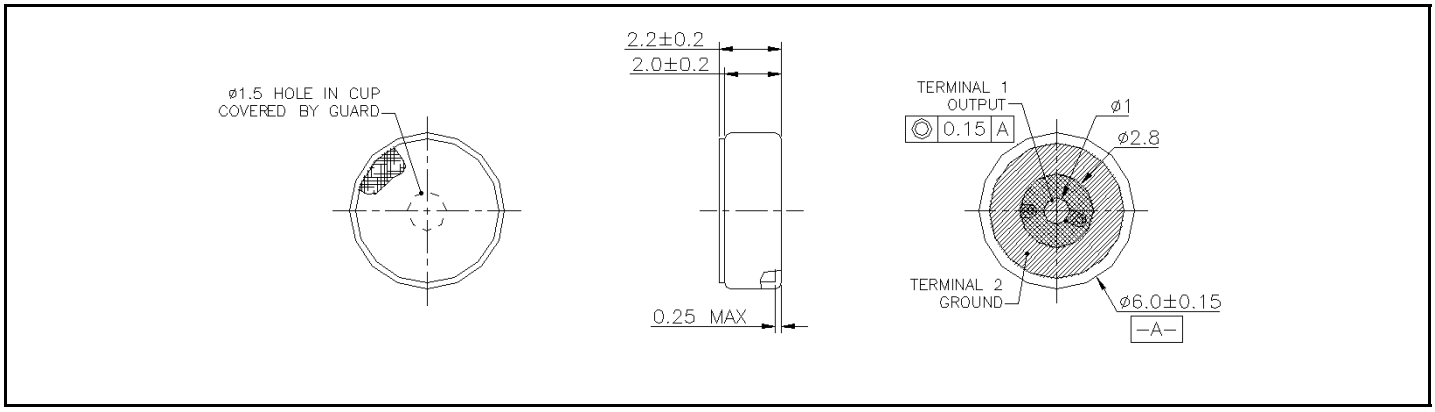
Dimensions	∅ 6 x 2.2	See Drawing in Section IV	
Weight	Less than 0.2g		
Solderering Heat Shock	Not Applicable		
Terminal Mechanical Strength	Not Applicable		
Absolute Maximum Ratings	Operating Voltage	Storage Temperature Range	Operation Temperature Range
	Vs (V)	Tstg °C	Tope °C
	10	-40°C to +85°C	-25°C to +70°C

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: +80°C for 96 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 96 hrs, and exposed to room temperature for 2 hrs.
Humidity Test	+70°C at 90%RH for 120 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

Better Shielded, RF noise resistant type.
Thermal Shock : 1cycle = 1Hr (-40°C) + 1Hr(75°C) , 5 cycles with dwells of 2hrs at each and change time < 3min.
ESD Test : 15kV no damage (include in mobile phone)