

PRODUCT SPECIFICATION

Doc: MB3015ASC-2

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

Model Number: MB3015ASC-2

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	-47	-44	-41	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	55			dB
Sensitivity Reduction	ΔS	f=1kHz, Pin=1Pa Vs= 2.0 - 1.5			-3	dB
Frequency Range		2.0 - 1.0		100-10,000		
	20 RELATIVE SENSITIVITY (dB) +3 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20	+3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4	11 5 6789 10k			
Schematic Diagram of Circuit	ECM	T impedance verter Capacitor 10pF 33	Term.1	C Output		

Mechanical Characteristics

Dimensions	Ø 3 x 1	.5 See Drawing i	n 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	The soldering time must be less than 2 seconds each pad, and soldering pull must be larger than 0.5Kg each pad.					
Absolute Maximum Ratings	Operating Voltage	Storage Temperature Range	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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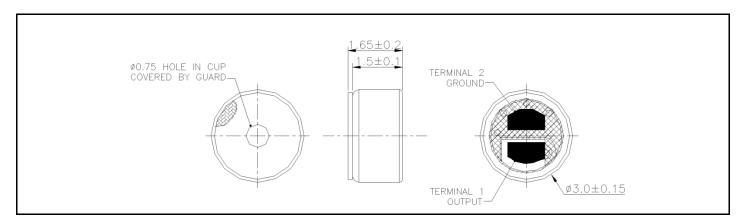
Doc: MB3015ASC-2

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 +85°C for 45 minutes, 27 cycles. (The measurements to be done after 2hrs of conditioning at +20°C.)transition time: 15 min.		

Dimensional Drawing



٧. Other

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