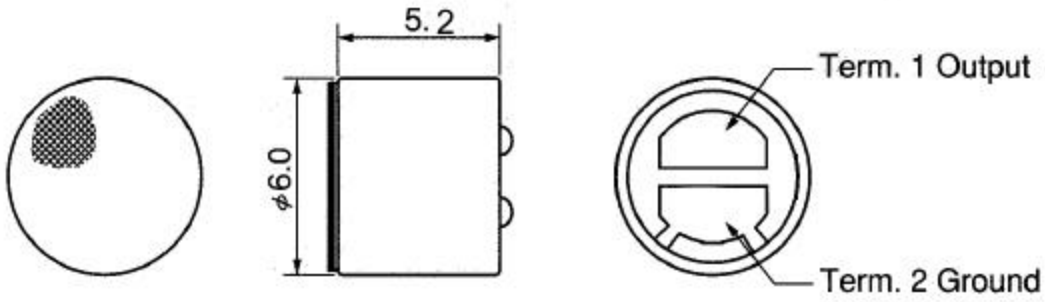
This specification applies to the electret condenser microphone outlined within this document.

Model Number: **MD6052ASZ-2**

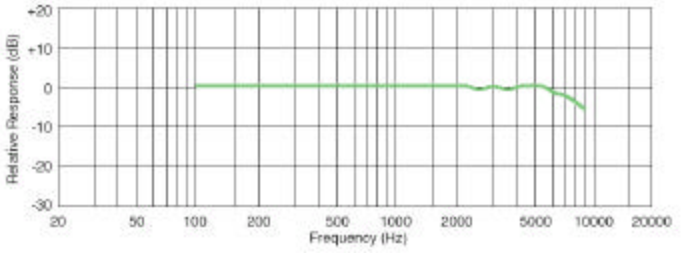
Size: Ø 6.0 x 5.2
Directivity: OMNI-DIRECTIONAL
Board Type: SOLDER
Capacitor(s) None

Dimensions: *(All dimensions are in mm)*

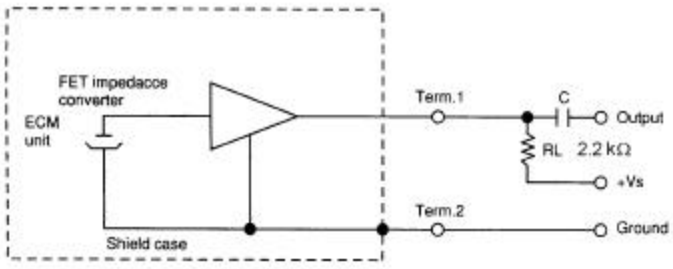


Electrical Specifications		
CHARACTERISTIC	SPECIFICATION VALUES	NOTES
Directional Characteristic	OMNI-DIRECTIONAL	
Electret Type	CHRG DIA/FOIL	
Sensitivity	-44 dB ± 3.0	(0dB=1 V/Pa, 1kHz)
Impedance	2.200 kΩ	Less than
Frequency Range	100-10,000 Hz	Hz
Max input Sound Level	120dB	S.P.L.
Standard Operating Voltage	2.0 V	V
Maximum operating Voltage	10 V	V
Current Consumption	0.500 mA	Max
Sensitivity Reduction	Within -3dB at 1.5V	
S/N Ratio	More than 55 dB	
Capacitor(s)	None	

Frequency Response Curve

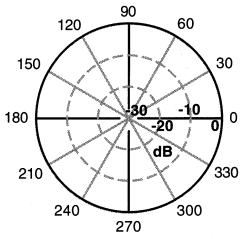


Schematic Diagram



Polar Pattern:

Polar plot shows reponce of unit at 1000 Hz.



Environmental Specifications

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.

Operating Temperatur	-25°C to +55°C
Storage Temperature:	-25°C to +60°C
Humidity:	+40°C at 95%RH for 240 hrs
Temperature Cycles:	After exposure at -25°C for 30 minutes, at+20°C for 10 minutes, at +60°C for 30 minutes, at +20°C for 10 minutes, 5 cycles. (The measurement to be done after 2 hrs of conditioning at +20°C.)
Low Temperature:	The microphone unit must operate within its sensitivity specifications after subjected to the following conditions: -25°C for 240 hrs, and exposed to room temperature for 2 hrs.
High Temperature:	The microphone unit must operate within its sensitivity specifications after subjected to the following conditions: +60°C for 240 hrs, and exposed to room temperature for 2 hrs.
ESD:	10kV
Vibration:	The microphone to have no interference in operation after vibrations, 10Hz to 55Hz for 1 minute full amplitude 1.52mm, for 2 hours at three axises.
Impact:	The microphone unit must operate when dropped three times once on each axis from a height of 1m onto a metal plate.
Solder Pull:	0.5kg each Pad