

CM02M-03S38-MA-4

Rev. 0-2022
RoHS3 & REACH
Omni Directional Microphones



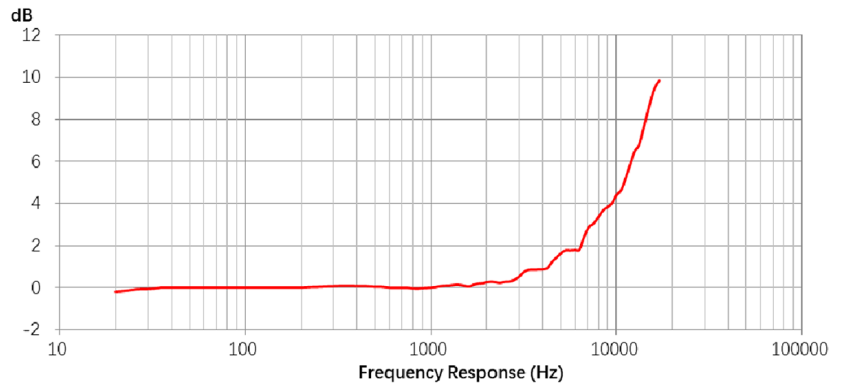
Operating Characteristics

ELECTRICAL

Type	Analog
Rated Voltage	2.2 VDC
Operating Voltage	1.5 to 3.6 VDC
Capacitance	N/A
Max Current	0.1 mA
Impedance	300 Ω

ACOUSTIC @ 94dB; 1000 Hz; Rated Voltage

Technology	MEMS
Directionality	Omni Directional
Sensitivity	-38 ± 1 dBV/Pa
Power Supply Rejection*	-101 dBV
*Tested At 100mVpp 7/8 duty cycle rectangular wave @217Hz, A-Weight, 20kHz BW	
Acoustic Overload Point	126 dB SPL
Total Harmonic Distortion	0.5% Max
Min S/N	62.5 dB



Physical Characteristics

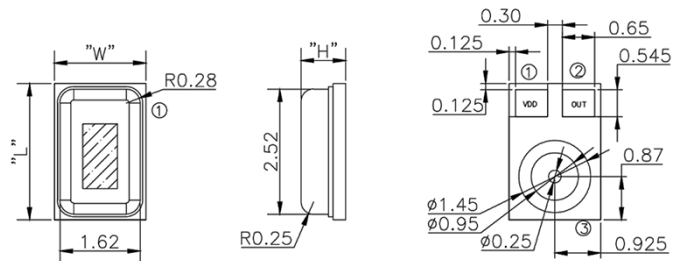
MATERIAL

Solder Pads Gold Plated Copper

TEMPERATURE RANGES

Operating -40 to +100 °C
Storage -40 to +100 °C

Weight 0.01 g



Item	Dimension	Tolerance
Length(L)	2.75	±0.10
Width(W)	1.85	±0.10
Height(H)	0.90	±0.10
Acoustic Port (AP)	Ø0.25	±0.05

Pin#	Pin Name	Description
1	VDD	Power Supply
2	OUTPUT	Output Signal
3	GND	GND

General tolerance = ±0.1 mm and all measurements in mm unless otherwise noted.

Revision	Description	By	Date
0-2022	Original Specification	CT	2022-10-20

Warranty: For a period of one (1) year from date of shipping under normal operations conditions. This warranty does not apply to products damaged through misuse, abuse, improper installation, alteration, rework, or attempt to repair.

The information contained herein is believed to be correct, but no guarantee or warranty, express or implied, with respect to accuracy, completeness or results is extended and no liability is assumed. Challenge Electronics reserves the right to make changes in any specification, data or material contained herein.