

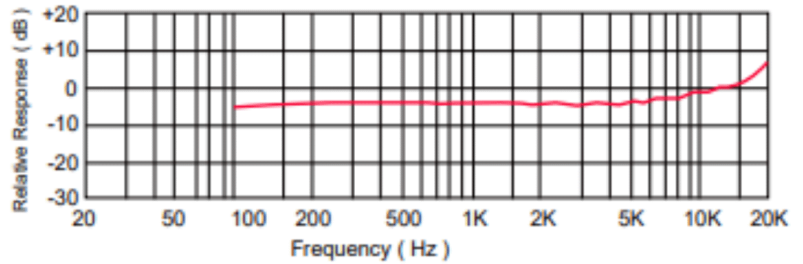
CM02M-03S38-MA-5

 Rev. 1-2023
 RoHS3 & REACH
 Omni Directional Microphones


Operating Characteristics

ELECTRICAL

Type	Analog
Rated Voltage	2.0 VDC
Operating Voltage	1.6 to 3.6 VDC
Capacitance	N/A
Max Current	0.15 mA
Impedance	450 Ω



ACOUSTIC @ 94dB; 1000 Hz; Rated Voltage

Technology	MEMS
Directionality	Omni Directional
Sensitivity	-38 ± 1 dBV/Pa
Power Supply Rejection*	-80 dBv
*Tested At 100mVpp Squarewave @217Hz, A-weighted	
Acoustic Overload Point	120 dB SPL
Total Harmonic Distortion	0.5% Max
Min S/N	59 dB

Physical Characteristics

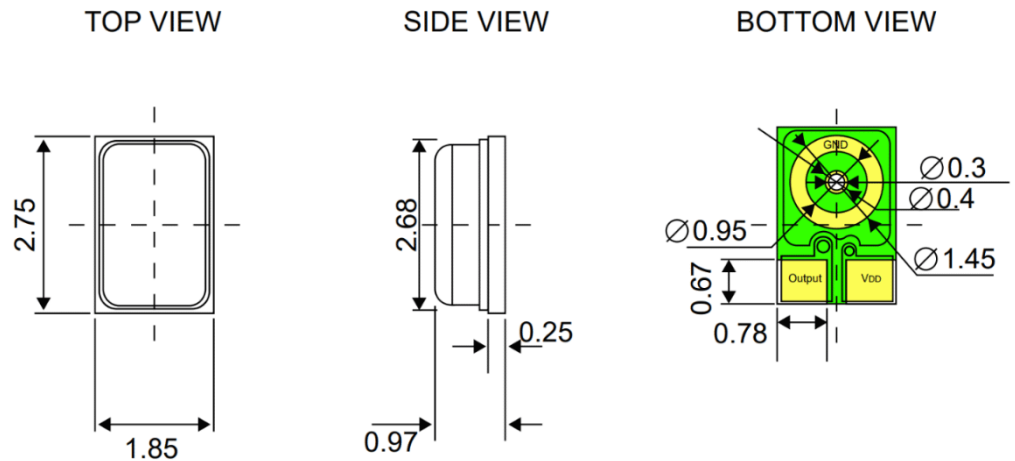
MATERIAL

Solder Pads	Gold Plated Copper
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TEMPERATURE RANGES

Operating	-25 to +60 °C
Storage	-25 to +60 °C

Weight	0.018 g
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General tolerance = ±0.5 mm and all measurements in mm unless otherwise noted.

Revision	Description	By	Date
0-2023	Original Specification.	AL	2023-03-30
1-2023	Updated max current from 0.07 to 0.15 mA, min S/N from 62 to 59 dB, and acoustic overload point from 126 to 120 dB SPL.	SK	2023-06-19

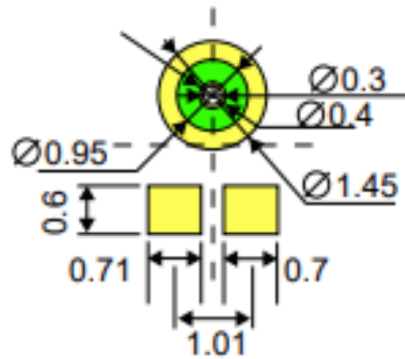
Warranty: For a period of one (1) year from date of shipping under normal operations conditions. This warranty does not apply to products damaged through misuse, abuse, improper installation, alteration, rework, or attempt to repair.

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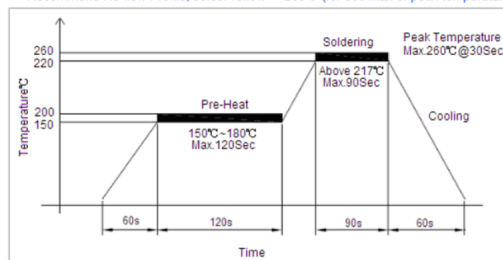
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Recommended Footprint



Recommended Reflow Profile

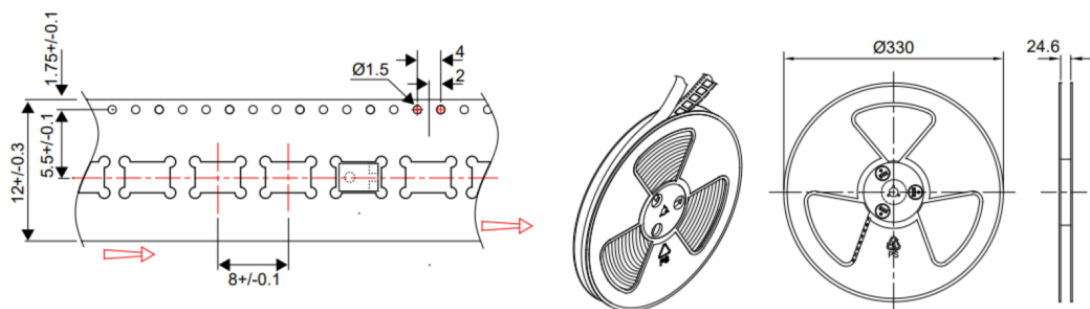
 Recommend Re-flow Profile, solder reflow $\leq 260^{\circ}\text{C}$ (for 30s Max of peak temperature).


Important Notes

In order to minimize device damage:

1. Do not boards wash or clean after the reflow process.
2. Do not apply over 0.3Mpa of air pressure into the port hole.
3. Do not expose to ultrasonic processing or cleaning.
4. Do not pull a vacuum over port hole of the microphone.

Tape & Reel Packaging



5000 pieces per reel, 10 reels per inner box, 2 inner boxes per carton, 100,000 pieces per carton

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