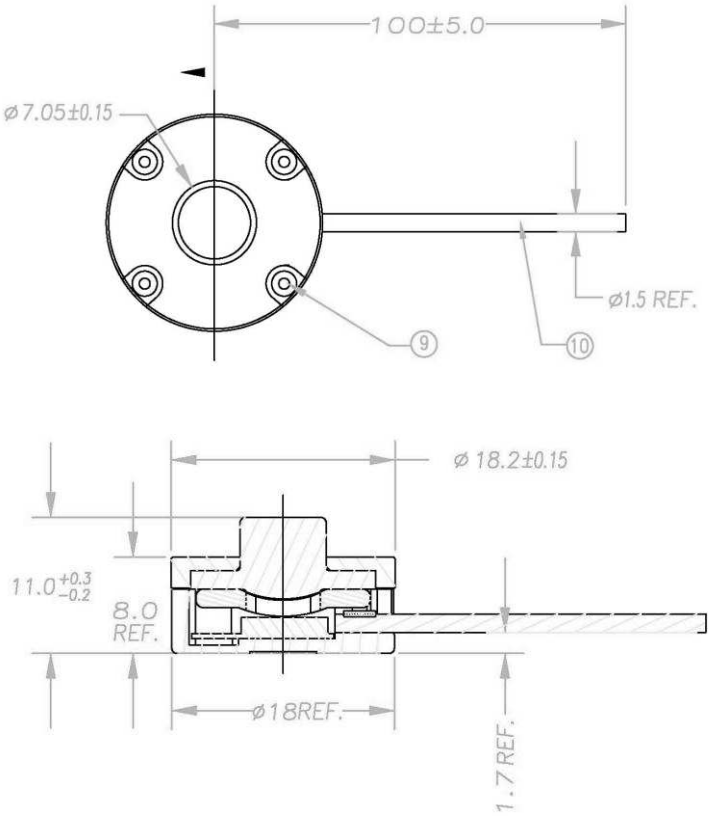
CONTACT MICROPHONE CM-01B

DIMENSIONS



SPECIFICATIONS

- **High Sensitivity**
- **Robust**
- **Low Noise**
- **Piezo Film Technology**
- **Shielded Cable**

The CM-01B Contact Microphone uses sensitive but robust PVDF piezo film combined with a low-noise electronic preamplifier to provide a unique sound or vibration pick-up with buffered output. The design minimizes external acoustic noise while offering extremely high sensitivity to vibration applied to the central rubber pad. The CM-01B is ideal for detecting body sounds.

FEATURES

- Broad Bandwidth
- High Sensitivity
- Excellent Impact Resistance
- Lightweight
- Low Cost

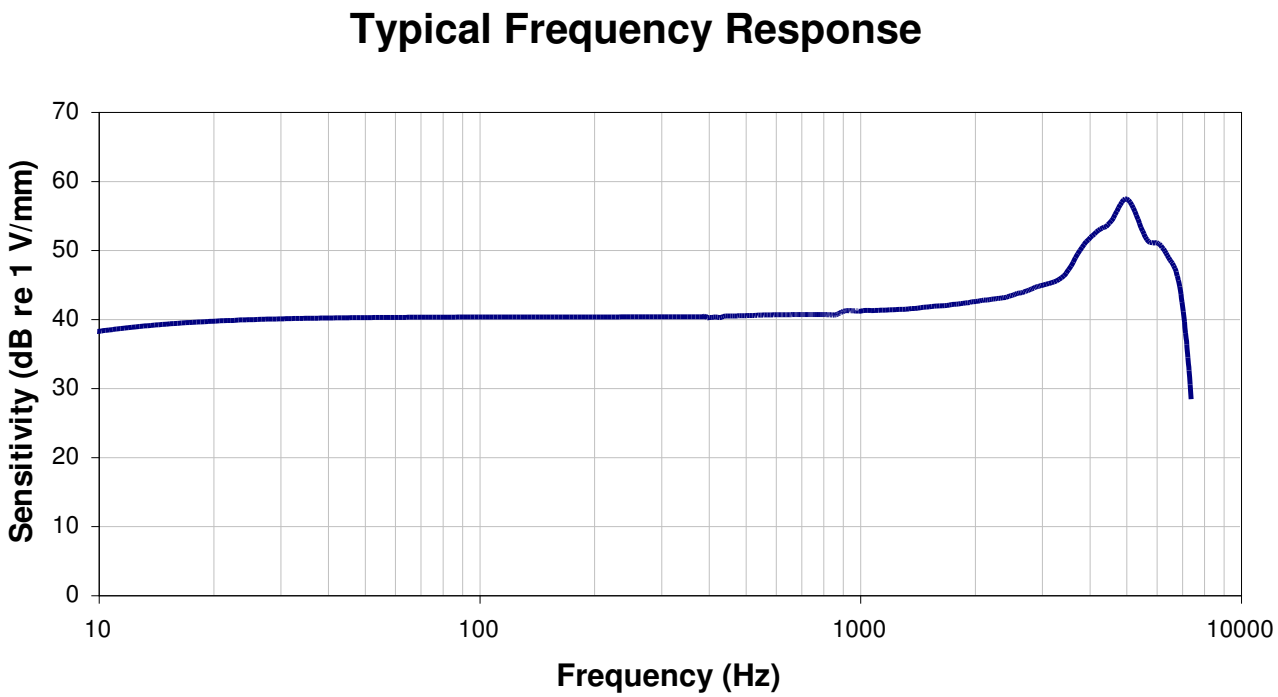
APPLICATIONS

- Electronic Stethoscope
- Bone-conducted Sound Pickup
- General Purpose Contact Microphone
- Vibration/Impact Sensing

PERFORMANCE SPECIFICATIONS

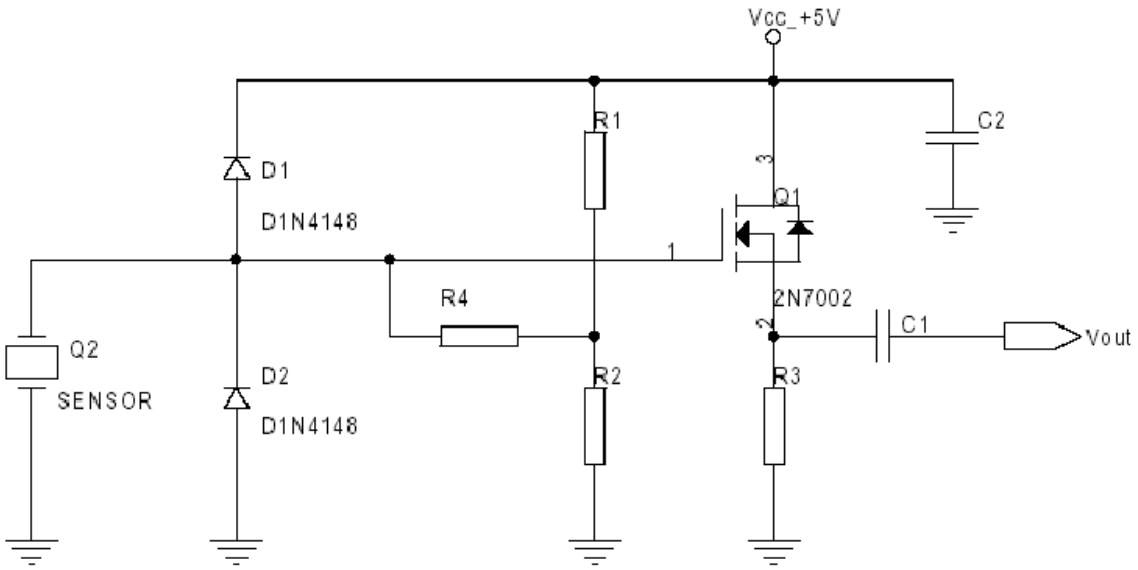
CHARACTERISTICS	Min	Typ	Max	Units
Sensitivity		40		V/mm
Lower Limiting Frequency (-3 dB)		8		Hz
Upper Limiting Frequency (+3 dB)		2.2		kHz
Resonance Frequency		5		kHz
Spring Constant		20		N/m
Electronic Noise		1		mV_{pk-pk}
Supply Voltage	4	5	30	V-DC
Supply Current		0.1		mA
Operating Temperature	+5		+60	°C
Storage Temperature	-20		+85	°C

TYPICAL FREQUENCY RESPONSE



The above plot shows a typical frequency response curve for a device clamped below and subjected to piston-like displacement to the face of the rubber sensing pad.

INTERNAL SCHEMATIC



Shield (braid): GND
Red wire: V_{CC}, +5 V
Yellow wire: Vout
R4 = 100 MΩ

C1 = C2 = 0.1 µF
R1 = R2 = 300 KΩ
R3 = 10 KΩ

ORDERING INFORMATION

Model No.	Part No.
CM-01B	1007079-1

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