



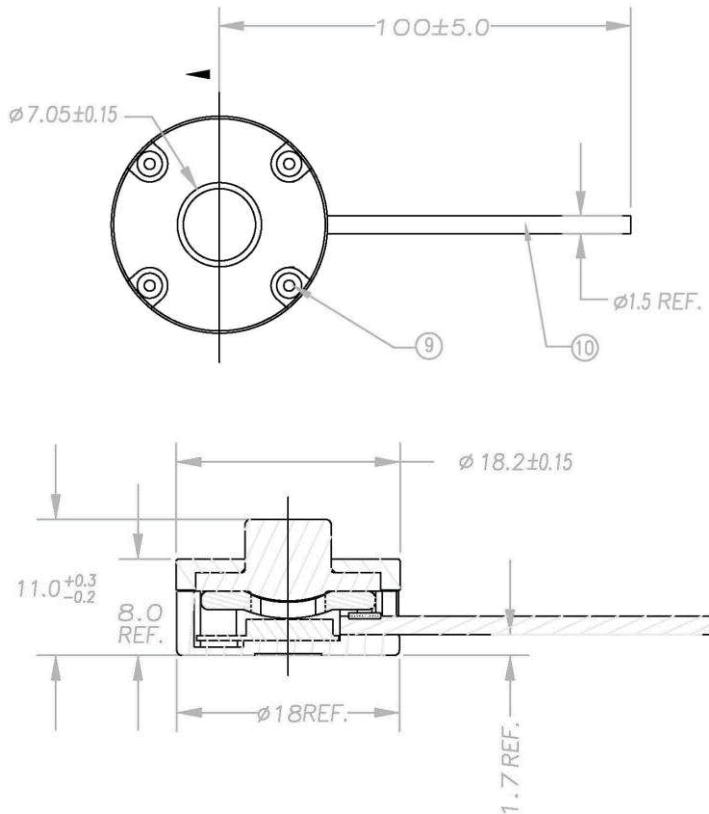
CONTACT MICROPHONE CM-01B

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.

DIMENSIONS



FEATURES

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

APPLICATIONS

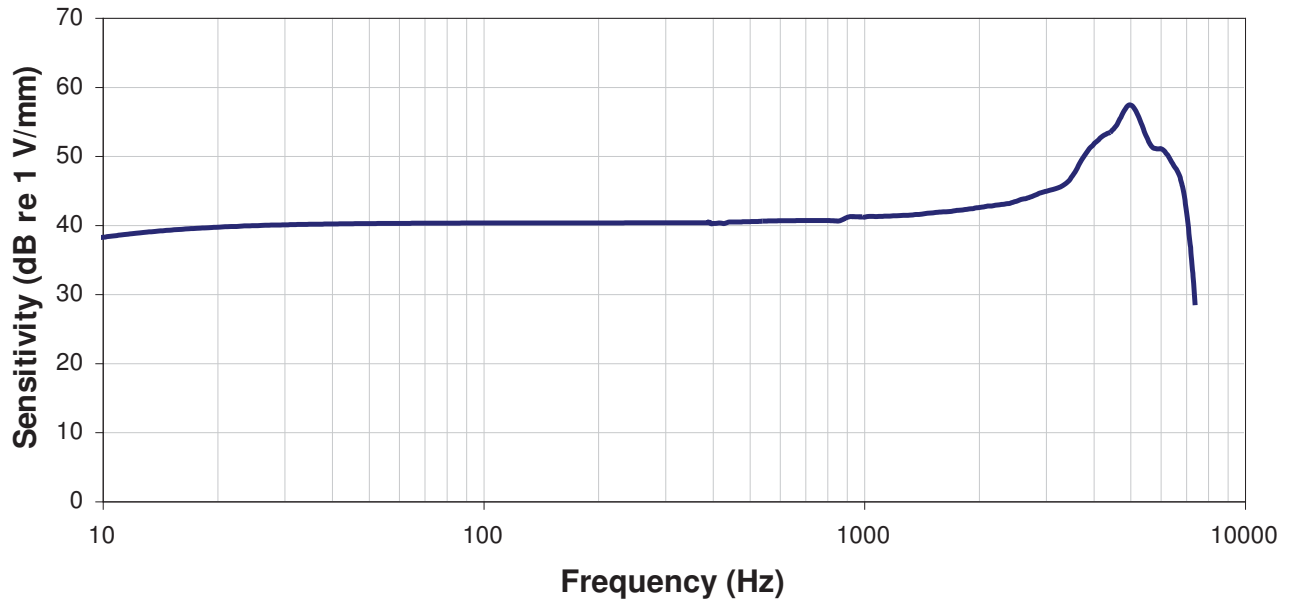
- ◆ Electronic Stethoscope
- ◆ Bone-conducted Sound Pickup
- ◆ General Purpose Contact Microphone
- ◆ Vibration/Impact Sensing

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 |

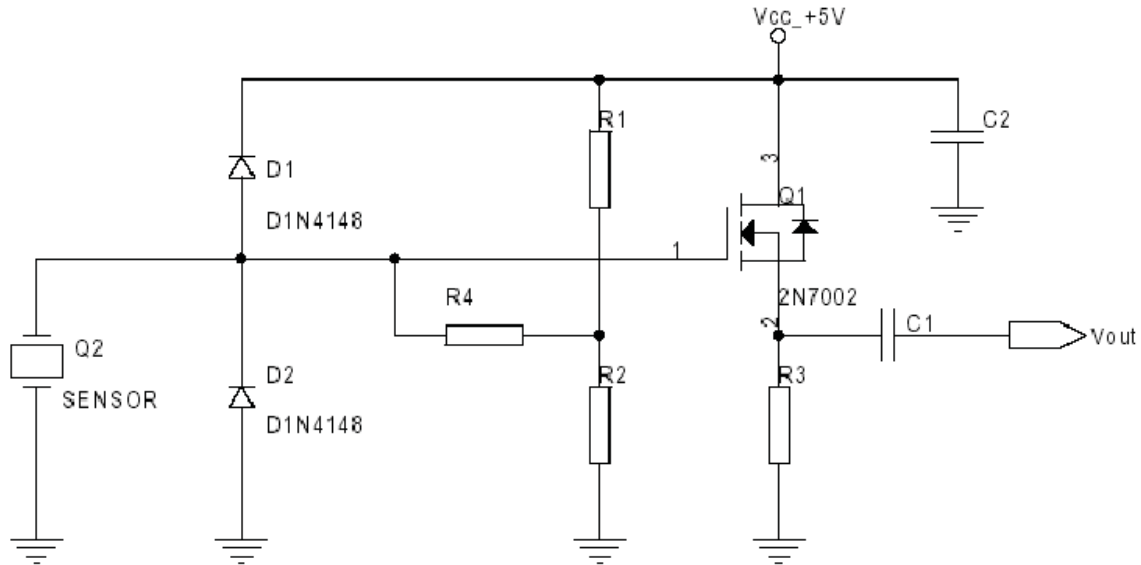
TYPICAL FREQUENCY RESPONSE

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: Vcc, +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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