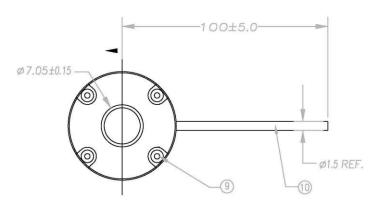
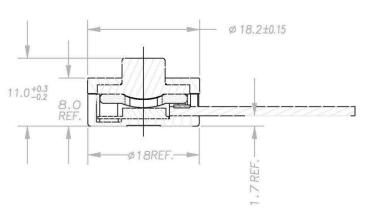




# **DIMENSIONS**





# **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.

## **FEATURES**

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

## **APPLICATIONS**

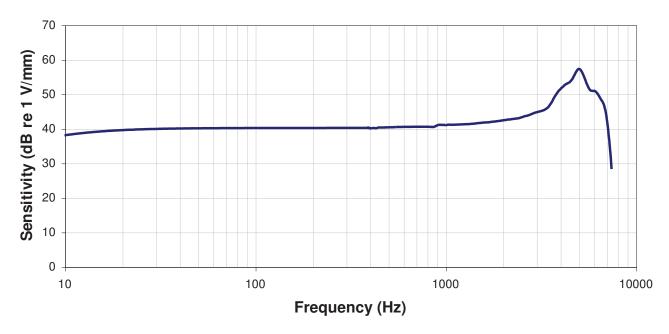
- Electronic Stethoscope
- Bone-conducted Sound Pickup
- General Purpose Contact Microphone
- Vibration/Impact Sensing

# PERFORMANCE SPECIFICATIONS

CHARACTERISTICS	Min	Тур	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

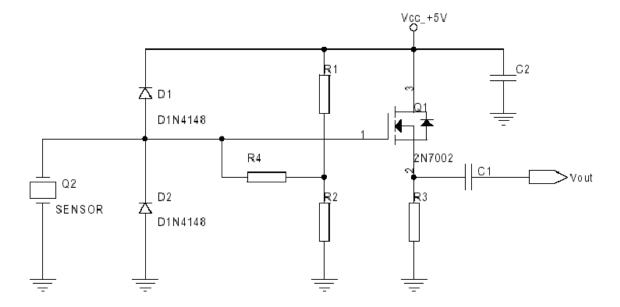
# TYPICAL FREQUENCY RESPONSE

# **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: V<sub>CC</sub>, +5 V
Yellow wire: Vout

Yellow wire: Vout  $R4 = 100 M\Omega$ 

 $C1 = C2 = 0.1 \mu F$  $R1 = R2 = 300 K\Omega$ 

 $R3 = 10 K\Omega$ 

# **ORDERING INFORMATION**

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

#### **NORTH AMERICA**

Measurement Specialties, Inc., a TE Connectivity Company Tel: +1-800-522-6752 Email: customercare.dtmd@te.com

#### **EUROPE**

MEAS Deutschland GmbH a TE Connectivity Company Tel: +49-800-440-5100 Email: customercare.dtmd@te.com

**ASIA** 

Measurement Specialties (China), Ltd., a TE Connectivity Company Tel: +86 0400-820-6015 Email: customercare.chdu@te.com

### TE.com/sensorsolutions

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