

High Temperature Probe Microphone and Preamplifier

Recommended for testing sound pressure measurements in high temperature environments and confined areas.



Automotive Applications



Test Lab Applications



Aerospace & Defense Applications

Applications

- Exhaust testing for Automotive & Aerospace
- Testing in confined areas
- Speaker diaphragm testing
- Acoustic impedance measurements
- Telephone analysis
- Musical instrument analysis
- Leak detection in Industrial Settings

Features

Sensitivity: 2.15 mV/Pa

■ Frequency: 2 Hz – 20 kHz

Cartridge noise: 45 dBA

Max amplitude: 164 dB

■ Temperature: -40 to +800°C

Polarization: prepolarized (OV)

Small form factor

Microphone Components and Performance

Model 377B26 is comprised of a 1/4" (6mm) prepolarized microphone and preamplifier within a protective housing that incorporates an impedance tube to minimize reflections and ensure accuracy. The probe comes with a 20mm, 40mm, 80mm and 160mm stainless steel tips; each acting as a low pass filter. The shorter tips will have the highest frequency capability. The longer tips allow for temperatures up to 800 °C.. Also included are a heat sink and a flexible probe tip. The 377B26 with a high dynamic range capability (164 dB) in combination with high temperature capability make it an excellent choice for exhaust testing.

Polarization Voltage (0V)

PCB® is the inventor of ICP® technology which is the very same technology modern prepolarized microphones are designed around. Model 377B26 operates on this very same ICP® sensor power, or any 2-20 mA constant current supply. This modern design is preferred for portable measurements or operation in high humidity applications. Design advantages include the ability to use coaxial cables as well as interchangeability with other ICP® sensors (accelerometers. pressure sensors, stain gages, etc.) resulting in set-up time savings and low channel cost.



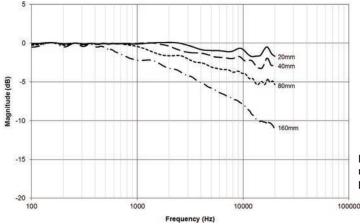




Quality

All PCB® acoustic products are made from the highest quality materials and are used by a variety of end users: automotive, aerospace & defense, OEM's, universities, consultants, computer, white goods (appliance) manufacturers and more. The PCB® advantage stems from our company owned state of the art in-house CNC manufacturing facility. This provides us capabilities which allows us to control all factors that affect quality and delivery. Several acoustic PhD's are on staff for new product development and to assist you with your application. PCB®

continues to invest heavily in ongoing employee training as well as our production and test equipment including multiple machining facilities, a new anechoic chamber and more. All our 377 series microphones are manufactured in clean rooms and go through an extensive aging program to provide the best stability even in tough applications where high humidity or wide temperatures exist. All are backed by our "Total Customer Satisfaction" (TCS) policy, which is a no risk policy.





Model 377B26 shown with the frequency responses of the 20, 40, 80 and 160mm probe tips

Specifications - 1/4" Pressure Field Microphone Model 377B26	
Nominal Microphone Diameter	1/4" (6mm)
Polarization Voltage	OV (prepolarized)
Open Circuit Sensitivity (at 250 Hz)	2.15 mV/Pa
Open Circuit Sensitivity (re 1 V/Pa)	-54 dB (+/- 3 dB)
Frequency range 20mm tip (+/- 3 dB)	2 to 20,000 Hz
Distortion Limit (3% distortion)	164 dB
Cartridge Thermal Noise	45 dB(A)
Environmental	
Operating Temperature Range (40, 80 and 160 mm Probe Tip)	-40 to +1472 °F -40 to +800 °C
Physical	
Housing Size (Diameter x Height)	0.50" x 4.4" 12.7 - 111 mm
Weight	1.8 oz (51gms)
Mating Cable Connectors	BNC

Supplied Accessories:

- 012A10 Coaxial cable, 10-ft, BNC to BNC plug
- 100-11129-30 File
- 100-11509-90 Grease
- 51606-02 Heat sink, probe removal tool
- 51607-01 Calibration adapter for metal probe
- 51607-02 Calibration adapter for flexible probe
- 53434-01 20mm probe tip
- 53434-02 40mm probe tip
- 53434-03 80mm probe tip
- 53434-04 160mm probe tip
- 54073-01 Cleaning tube
- 55103-01 Pliers, tip trim tool
- 55454-01 Flexible tubing
- 55455-01 Flexible probe tip
- 56508-01 Calibration coupler
- ACS-42 microphone and preamplifier system calibration



Optional Accessories:

- CAL200 Handheld calibrator
- CAL250 Handheld calibrator



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AS9100 CERTIFIED ■ ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025

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