



MODEL 130B40

SURFACE MICROPHONE

- Dynamic range: 32 dB(A) - 142 dB
- Maximum sound pressure level: 150 dB
- Low profile: 0.126 in (3.2 mm)

TYPICAL APPLICATIONS

- Wind tunnel testing
- Auto and aircraft wind noise
- Brake and tire noise
- Powertrain noise
- Environmental CAT (Clear Air Turbulence), tornado's, hurricanes, etc.
- Measurements in confined area

STANDARDS COMPLIANCE

- Calibration reference microphone traceable to NIST, PTB or DFM National Labs
- PCB calibration service in compliance with ISO 10012-1, ANSI/NCSL Z540.3



USE OF MODEL 130B40

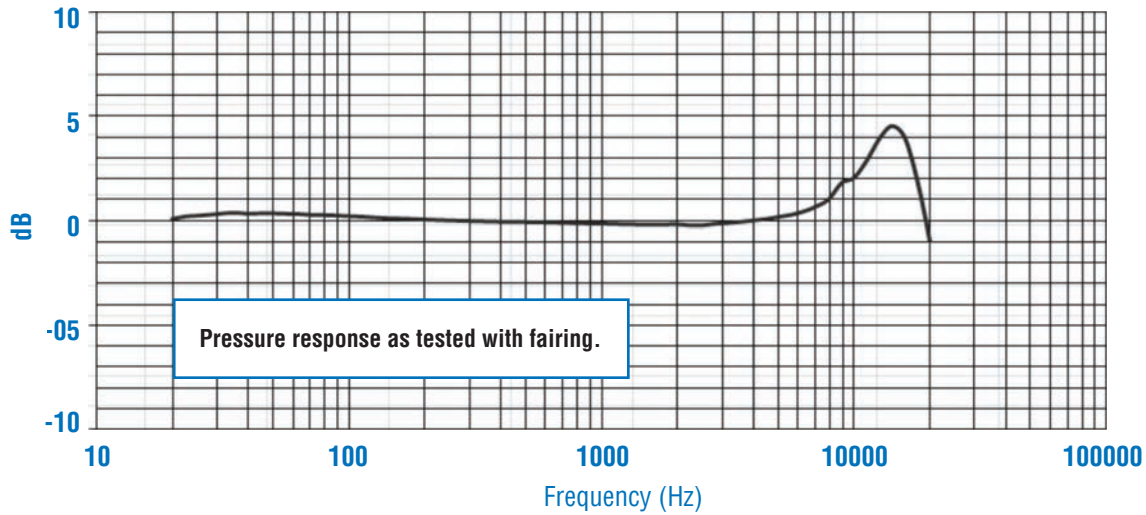
Model 130B40 is a prepolarized, surface microphone providing a cost-effective solution for measuring surface pressure. Through CFD modeling software, the 130B40 is optimized for wind-induced noise applications. Front venting allows for atmospheric pressure equalization and flush mounting or adhesive mounting on flat planar or curved surfaces. The low profile height allows for measurements to be taken where traditional microphones don't fit. The water and dust resistant mesh grid cap makes it an excellent choice for tire wells and other rough environments. The unit comes with a built-in preamplifier and attached 5-foot cable. Because it's a pressure field response microphone, it is commonly used in small closed couplers, confined spaces, or flush mounted to hard reflective surfaces.

POLARIZATION VOLTAGE – ICP® (0V) PREPOLARIZED

PCB® is the inventor of ICP® sensor power technology. All manufacturers of IEC 61094-4 compliant prepolarized (0V) microphones use the technology that PCB developed. Prepolarized microphones operate on 2-20 mA constant current supply and use coaxial cables resulting in significant per channel cost savings over the PCB 200V models. Other ICP® compatible sensors such as accelerometers, force, strain, and pressure sensors use the same power supplies and cables as prepolarized microphones, further reducing set-up time and initial investment costs.

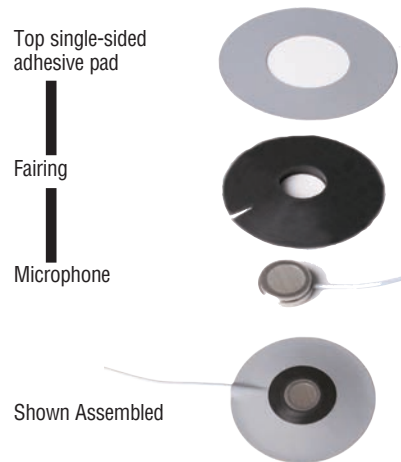
PCB® QUALITY COMMITMENT

PCB is uniquely equipped with a state of the art, CNC machining facility, allowing control over quality, pricing, and delivery. Investments in clean rooms, anechoic, and environmental test chambers, combined with our rigorous testing and aging process, ensures our products will survive in demanding environmental conditions. PCB has the industry's best 5-year warranty with a "Total Customer Satisfaction" policy.



130B40 PREPOLARIZED SURFACE MICROPHONE		
Sensitivity at 250 Hz (± 3 dB)	mV/Pa (dB re 1 V/Pa)	8.5 (-41.4)
Frequency Range (± 3 dB)	Hz	20 - 10,000
Frequency Range (± 6 dB)	Hz	20 - 20,000
Cartridge Thermal Noise	dB(A)	32
Distortion Limit (3% distortion)	dB	142
Distortion Limit (Max Before Clipping)	dB	150
Pressure Equalization Vent	Vent Type	Front Vented
Environmental Specifications		
Operating Temperature Range	$^{\circ}$ F ($^{\circ}$ C)	-40 to +176 (-40 to +80)
Electrical Specifications		
Polarization Voltage	V	0
Maximum Output Voltage*	VPk	± 7
Physical Specifications		
Size (Dia. x Height without Fairing)	in (mm)	0.52 x 0.126 (13.2 x 3.2)
Size (Dia. x Height with Fairing)	in (mm)	1.62 x 0.126 (41.0 x 3.2)
Mating Cable Connectors	Microdot	10-32
Cable Length (attached)	ft (m)	5 (1.5)

* all specifications typical unless otherwise noted



OPTIONAL ACCESSORIES

- **54924-01** – double-sided base adhesive pad
- **54925-01** – single-sided top adhesive pad
- **55739-01** – silicone fairing