



Structural Solutions Private Limited

Automotive Modal Analysis

Accelerometers; Dynamic Force Sensors; Modally Tuned®, ICP®, Impact Hammers; Electrodynamic Modal Shakers; and Accessories

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PCB® Piezotronics Inc., USA is uniquely positioned in sensor industry to satisfy a wide range of research, test, measurement and monitoring.

Structural Solutions Private Limited, the exclusive representative of PCB group in India is a professional engineering company engaged in offering high-end technology intensive products and system solutions to Indian industry for automotive modal analysis applications.

Key Features:

- Small, Light weight Structure testing
- Impact testing
- Field Calibration
- Dynamic Force measurement
- Engine & turbo testing.
- Low cost, rugged
- High Sensitivity

Application:

- Structure testing
- Impact testing
- Calibration Handheld shaker
- Dynamic Force measurement
- Engine & turbo testing

PCB® manufactures accelerometers, dynamic force sensors, instrumented impact hammers, electrodynamic modal shakers and accessories specifically designed for detection, measurement, motion, shock, and vibration to meet your modal analysis needs.

PCB® offers a complete line of ICP® single axis and triaxial accelerometers for automotive modal analysis ranging from highly sensitive and lightweight. Sensors for low level inputs and mild environments to units with high ranges, hermetically sealed connectors, and rugged titanium construction for severe inputs and environments.



352C23-Single Axis
5 mV/g, 1000 g pk
0.2 gm



352C03- Single Axis
10 mV/g, 500 g pk
5.8 gm



356A01- Triaxial
5 mV/g, 1000 g pk
1.0 gm



356A33-Triaxial
10 mV/g, 500 g pk
5.3 gm



339A30-Filtered and High Temperature,
Triaxial, 10 mV/g, 500 g pk, 4.0 gm



333B30 - Single Axis
100 mV/g, 50 g pk
4.0 gm



333B50 - Single Axis
1000 mV/g, 5 g pk
7.5 gm

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Modally Tuned®, ICP®, Impact Hammers for Automotive Modal Analysis

Modally Tuned®, ICP®, impact hammers are easy-to-use solutions for delivering impulse forces into automotive test structures. “Modal tuning” is a technology that ensures the structural characteristics of the hammer do not affect measurement results. This is accomplished by eliminating hammer resonances in the frequency range of interest from corrupting the test data, resulting in more accurate and consistent outcomes.



086C03

Body-in-white Structures, Engine Components, Steering Columns



Heavy-Duty Truck Frames, Suspensions, Bus Structures - 086D20

PCB® recommends the use of Model 288D01 impedance sensor for all automotive modal testing applications. This sensor simultaneously measures an applied, driving point force and response acceleration in a single location. This is extremely important for multiple input test techniques to satisfy Maxwell's theory of reciprocity.



208C02



288D01

Model 394C06 handheld shaker is a small, self-contained, battery powered, vibration exciter specifically designed to conveniently verify accelerometer and vibration system performance. It accepts sensors weighting up to 210 grams in weight and delivers a controlled, 1 g mechanical excitation.



2100E11



2050A

Model 2100E11 Modal

Shaker, a lightweight electrodynamic modal exciter, is capable of providing 100 lbf (440 N) of peak force excitation in a small footprint weighing just 33 pounds (15 kg). With a 1” stroke and frequency range up to 3000 Hz, Model 2100E11 is suitable for a multitude of automotive modal analysis applications.

Structural Solutions Private Limited

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