

Piezoresistive Accelerometer

BST 10L

Uniaxial

Features

- Very small size and rugged
- Anodized Aluminium Housing
- SEA J211 conform

Application

- Crash test
- Shock test

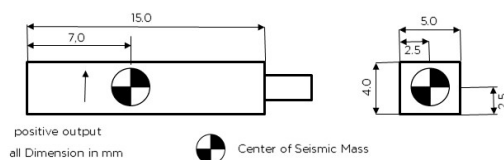
Description

The new model BST 10L is a uniaxial accelerometer based on piezo resistive technology. This accelerometer meets SAEJ211 specifications for instrumentation for impact testing. With the fully Wheatstone-Bridge (4 wire system) configuration helps to connect the sensor on all data acquisition systems. The very light weight and small size of the sensor makes it easy to mount it on difficult positions at the car for a crash test or for shock test application.

Do to the anodized aluminium housing and the position of the seismic mass makes it possible to use it for crash test. With a 6 m, very rugged, shielded and flexible 4-wire cable are all common connectors are mountable. As an option, we supply the sensor with a Dallas ID and a Shunt resistor in the connector.

A calibration for the sensor is obligatory.

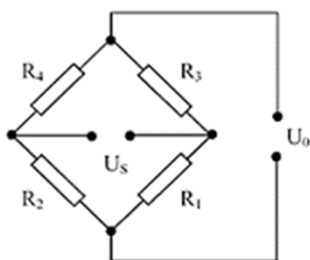
Dimensions



Specifications

Range	500g	1000 g	2000 g
Sensitivity typ.	0.04 mV/V/g	0.018 mV/V/g	0.016 mV/V/g
Frequency 5% typ.	2200 Hz	3000 Hz	3500 Hz
Supply voltage	3 to 10 VDC constant		
Zero measurement output	+/- 50 mV typ		
Thermal Shift Zero	< +/- 0.04 % FSO/°C	(0° to 50° C)	
Thermal Shift Span	- 0.2 % /°C typ	(0° to 50° C)	
Non-Linearity	+/- 1% of FSO		
Transverse sensitivity	2% typ (3% max.)		
Damping ratio	0.7		
Resonance Frequency	> 14 kHz	>20 kHz	
Shock limit	8000 g		
Operation Temperature	-20° to 70° C		
Material	Aluminium, anodized		
Dimensions	15.0 x 5.0 x 4.0 mm		
Weight	2.0 gram without cable		
Bridge Resistance	1800 to 2200 Ohm		
Cable	6 m, 4 wires, shielded PUR, AWG 30		

Diagram



Cable Code

Red = Excitation +
Black = Excitation –

Green = Signal +
White = Signal –

Order information

BST 10L-2000-6Z

10L = model name
2000 = Range 2000g
6 = 6 m Cable,
Z = no connector