bay SensorTec

Piezoresistive Accelerometer

BST 10C
uniaxial

Features

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

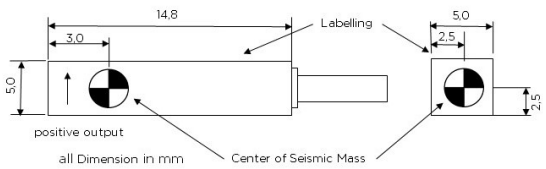
Application

- Crash test
- Shock test

Description

The new model BST 10C 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 6m, 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.

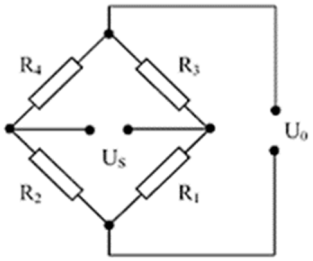
Dimensions



Specifications

Range	1000 g	2000 g
Sensitivity typ.	0.018 mV/V/g	0.016 mV/V/g
Supply voltage	3 to 10 VDC constant	
Zero measurement output	+/- 25 mV typ (Option +/- 10 mV)	
Thermal Shift Zero	< +/- 0.04 % FSO (0° to 50° C)	
Thermal Shift Span	- 0.2 % /°C +/- 0.05	(0° to 50° C)
Frequency	0 to 3500 Hz	5% typ
	0 to 5700 HZ	1 dB typ
Non-Linearity	< 1% of FSO	
Transverse sensitivity	2% typ (3% max.)	
Damping ratio	0.05 typ	
Resonance Frequency	> 20 kHz	
Shock limit	8000 g	
Operation Temperature	-20° to 70° C	
Material	Aluminium, anodized	
Dimensions	14.8 x 5.0 x 5.0 mm	
Weight	1.5 gram without cable	
Bridge Resistance	1500 to 2000 Ohm	
Cable	6 m, 4 wire, shielded PUR, AWG 32	

Diagram



Cable Code

Red = Excitation +	Green = Signal +
Black = Excitation –	White = Signal –

Order information

BST 10C-2000-6Z
10C = model name
2000 = Range 2000g
6 = 6m Cable,
Z = no connector

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