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Piezo resistive Accelerometer

BST 12C Uniaxial

Features

- DC Response
- High Shock
- Calibration
- Meets SAE J211
- Aluminium Housing
- Small Size

Application

- Crash test
- Flatter Test

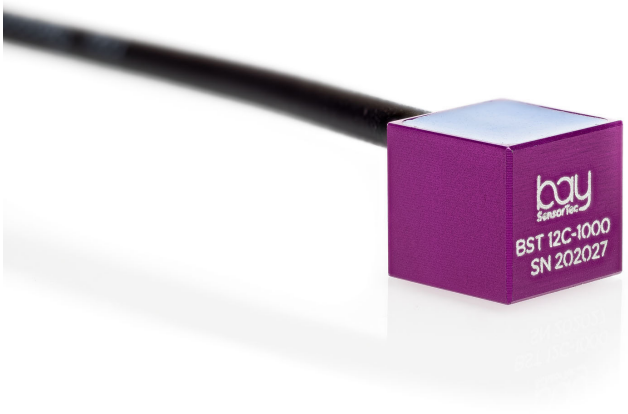
Description

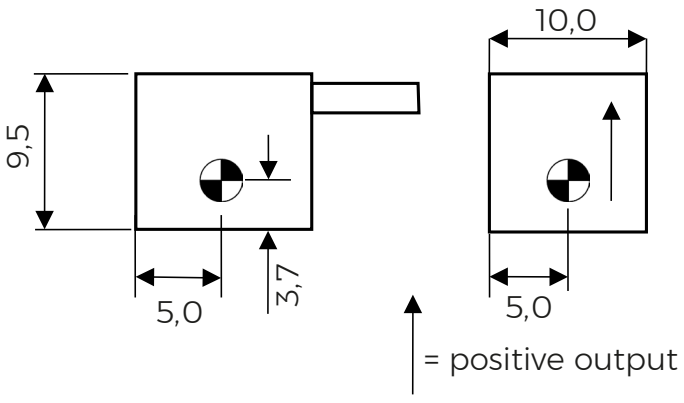
The new model BST 12C is a uniaxial accelerometer based on piezo resistive technology. With the fully Wheatstone-Bridge (4 wire system) configuration helps to connect the sensor on all data acquisition systems. The light weight and small size of the sensor makes it easy to mount it on difficult positions at the car for a crash test or for flatter test application.

Do to the anodized aluminium housing to mount it with glue on difficult positions. With the 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





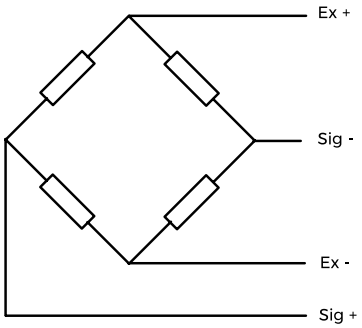
Specifications

Range (g)	500	1000	2000
Sensitivity (mV/V/g)	0,04	0,018	0,016
Frequency 5% (Hz)	2000	2750	3000
Resonance Frequency (kHz)	>13	>18	> 20
Damping ratio	0.7	0.7	0.7
Shock limit (g)	6000	8000	8000

Supply voltage	3 to 10 VDC constant	
Zero measurement output	+/- 50 mV	
Thermal Shift Zero	< +/- 0.05 % FSO	(0° to 50° C)
Thermal Shift Span	- 0.2 % /°C +/- 0.05	(0° to 50° C)
Operation Temperature	-20° to 80° C	
Transverse sensitivity	3% max.	
Non-Linearity	< 1%	
Housing Material	Aluminium, anodized	
Dimensions	10.0 x 10.0 x 9.4 mm	
Mounting	with glue	
Housing Weight	3 grams	
Cable	6 m AWG 30, 4 wire, shielded, PUR	
Cable Weight	12 grams per meter, Ø 3,0 mm	

All data are typical at 23°C and 10 Vdc supply.

Diagram



Cable Code

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

Order information

BST 12C-1000-6Z
12C = Model Name
1000 = Range 1000 g
6 = 6 m cable
Z = no connector

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