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Piezo resistive Accelerometer

BST 24C triaxial

Features

- Anodized Aluminium Housing
- DC Response
- Damped
- SAE J211 conform
- Low Mass

Application

- Crash test
- Shock test

Description

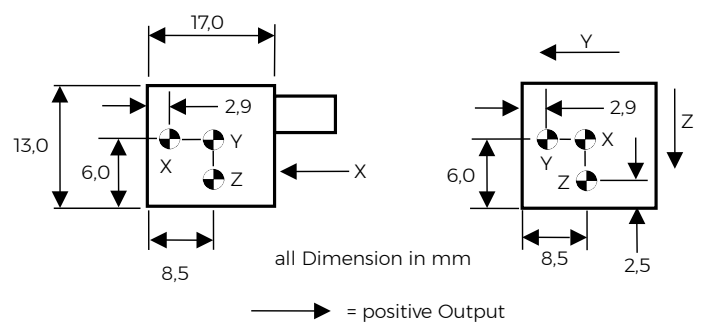
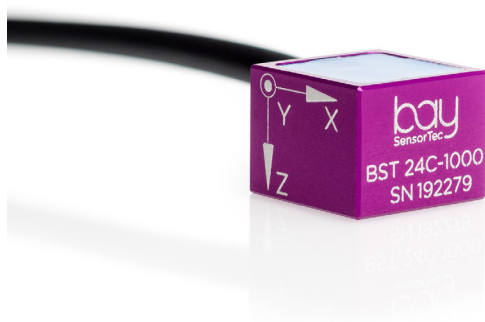
The new model **BST 24C** is a triaxial accelerometer based on piezo resistive technology. With a four-active arm Wheatstone-Bridge (4 wire system) configuration and a damping ratio 0.7 helps to connect the sensor on all data acquisition systems. The light weight and small size of the sensor makes it easy to mount it on difficult places. The sensor is useable for crash test and flutter test.

Do to the anodized aluminium housing the mounting is easy with a glue. The sensor has 6 m very high rugged and flexible 4-wire per axe cable.

As an option, we supply the sensor with a Dallas ID and a Shunt resistor in the connector if it possible.

A calibration for the sensor is obligatory

Dimensions

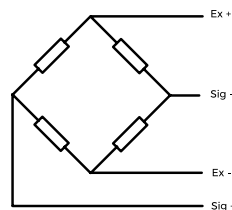


Specifications

Range (g)	100	200	500	1000	2000
Sensitivity (mV/V/g)	0,1	0,06	0,035	0,018	0,016
Frequency 5% (Hz)	1100	1400	2000	2750	3000
Resonance Frequency (kHz)	>6	>8	>13	>18	> 20
Damping ratio	0,4	0,4	0,7	0,7	0,7
Shock limit (g)	4000	4000	6000	8000	8000

Supply voltage	3 to 10 VDC constant	
Zero measurement output	+/- 50 mV	
Thermal Shift Zero	< +/- 0.04 % FSO	(0° to 50° C)
Thermal Shift Span	- 0.2 % /°C +/- 0.05	(0° to 50° C)
Non-Linearity	< 1 % of FSO	
Transverse sensitivity	2 % typ. (3 % max.)	
Operation Temperature	-20° to 80° C	
Storage Temperature	-25° to 100° C	
Material	Aluminium, anodized	
Dimensions	17.0 x 17.0 x 13.0 mm	
Weight Housing	17 gram without cable	
Weight Cable	30 gram per meter	
Cable	6 m, 12 wire, shielded PUR, AWG 30	

Diagram



Cable Code

x-axis

red / violet = Excitation +
black / violet = Excitation -

green / violet = Signal +
white / violet = Signal -

y-axis

red / grey = Excitation +
black / grey = Excitation -

green / grey = Signal +
white / grey = Signal -

z-axis

red = Excitation +
black = Excitation -

green = Signal +
white = Signal -

Order information

BST 24C-1000-6Z

24C = model name
1000 = Range 1000 g
6 = 6 m Cable
Z = no connector