Piezo resistive Accelerometer

BST 26C Triaxial

CONTACT
+49 89 189 41 49-11
info@bay-sensortec.com

FEATURES

- Meets SAE J211 spec.
- DC MEMS PR Accelerometer
- High Shock
- Aluminium Housing, anodized
- Low Mass, Adhesive Mount
- Calibration

APPLICATION

- Crash Tests
- Shock Tests

DESCRIPTION

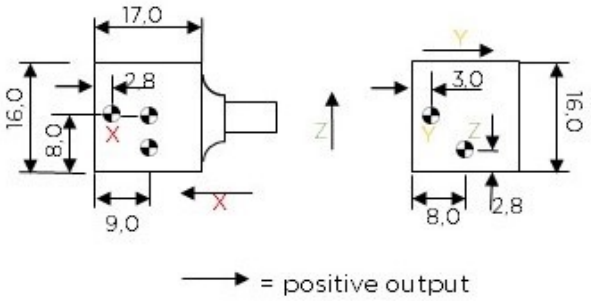
The model BST 26C is a triaxial accelerometer based on piezo resistive technology. A Wheatstone-Bridge (4 wire system) configuration and a selectable damping ratio helps to connect the sensor on all data acquisition systems. The light weight and small size of the sensor makes it easy to mount it on difficult places at the car for a crash test or flatter test application.

Due to the anodized aluminium housing the mounting is easy with a glue. The sensor has 6m very high rugged and flexible 4-wire per axe cable. This makes it easy to place it on difficult places fixed with glue.

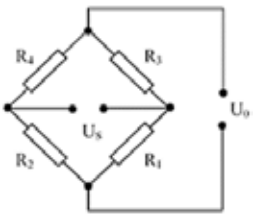
As an option, we supply the sensor with a Dallas ID and a Shunt resistor in the connector if possible.

A calibration for the sensor is obligatory.

DIMENSIONS



DIAGRAM



SPECIFICATION ACCELEROMETER

All data are typical at 23°C AND 10 VDC SUPPLY.

Range (g)	500	1,000	2,000
Sensitivity typ. (mV/g)	0.04	0.018	0.016
Frequency response (Hz) 5% max	2,750	3,500	4,000
Resonance Frequency (kHz)	>13	>20	>23
Shock limit (g)	6,000	8,000	10,000

ELECTRICAL PERFORMANCES

Supply voltage	3 to 10 VDC constant
Zero measurement output	+/- 25 mV max. +/- 50 mV
Input Bridge Resistance	1,600 to 2,000 Ω
Output Bridge Resistance	1,600 to 2,000 Ω
Isolation	sensing element isolated from housing

ENVIRONMENTAL PERFORMANCES

Thermal Shift Zero	± 0.04 % FSO (0 °C to 50 °C)
Thermal Shift Span	- 0.2 % / °C +/- 0.05 (0 °C to 50 °C)
Operation Temperature	- 40 °C to + 100 °C
Storage Temperature	- 40 °C to + 120 °C
Protection Class	IP64
Damping	gas damping
Non-Linearity	< 1 % of FSO
Transverse sensitivity	< 2 % typ. (3 % max.)
Damping ratio	0.7 typ.
Housing Material	Aluminium, anodized
Mounting	Glue
Dimensions	16.0 x 16.0 x 17.0 mm (l x w x h)
Weight Housing	15 grams without cable
Cable	integrated, 12-wire, shielded AWG 30
Cable Material	PUR, black
Cable Weight	30 grams per meter, Ø 4.4 mm

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 26C-2000-6Z
26C = Model name
2000 = Range 2000 g
6 = 6 m Cable
Z = no connector

OPTIONAL

Additional Cable Length
Connector
Dallas ID
Shunt Resistor
Calibration DAkkS DIN EN ISO/IEC 17025:2018