Piezo resistive Accelerometer
BST 12C Uniaxial

Features
- DC Response
- High Shock
- Calibration
- Anodized Aluminium Housing
- Small Size
- Meets SAE J-211

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>100</th>
<th>200</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range (g)</td>
<td>0.1</td>
<td>0.06</td>
<td>0.04</td>
<td>0.018</td>
<td>0.016</td>
</tr>
<tr>
<td>Sensitivity (mV/V/g)</td>
<td>1100</td>
<td>1400</td>
<td>2000</td>
<td>2750</td>
<td>3000</td>
</tr>
<tr>
<td>Frequency 5% (Hz)</td>
<td>&gt;6</td>
<td>&gt;8</td>
<td>&gt;13</td>
<td>&gt;18</td>
<td>&gt;20</td>
</tr>
<tr>
<td>Resonance Frequency (kHz)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Damping ratio</td>
<td>0.4</td>
<td>0.4</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Shock limit (g)</td>
<td>4000</td>
<td>4000</td>
<td>6000</td>
<td>8000</td>
<td>8000</td>
</tr>
</tbody>
</table>

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
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

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

## Diagram

![Diagram](image)

## Cable Code

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

## Order information

BST 12C-2000-6Z
12C = Model Name
2000 = Range 2000g
6 = 6m cable
Z = no connector