Piezo resistive Accelerometer

BST 16C Uniaxial

Features

- Damping 0.7
- Very small size and rugged
- Anodized Aluminium Housing

Description

The new model BST 16C is a uniaxial accelerometer based on piezo resistive technology. This accelerometer is designed 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.
Specifications

- **Range**: 1000 g
- **Sensitivity typ.**: 0.018 mV/V/g
- **Supply voltage**: 3 to 10 VDC constant
- **Zero measurement output**: +/-50 mV typ
- **Frequency 5% typ**: 0 to 3000 Hz
- **Damping ratio**: 0.7 typ
- **Shock limit**: 8000 g
- **Operation Temperature**: -20° to 70° C
- **Dimensions**: 14.8 x 10.4 x 5.0 mm
- **Weight**: 1 gram without cable
- **Bridge Resistance**: 1500 to 2000 Ohm
- **Cable**: 6m, 4wire, shielded PUR, AWG 32

Diagram

```
Ex +   Sig -
|      |
Ex -   Sig +
```

Cable Code

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

Order information

- **BST 16C-2000-6Z**
- **16C** = Model Name
- **2000** = Range 2000g
- **6** = 6m cable
- **Z** = no connector