

Capacitive Accelerometer

BST 52K1

uniaxial

Features

- Anodized Aluminium Housing
- DC Response
- Voltage Output
- Calibration

Applications

- Train
- Automotive
- Truck and Busses
- Comfort

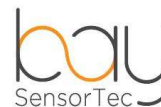
Description

The new model BST 52K1 is a uniaxial accelerometer based on variable capacitive technology with a good frequency response. The accelerometers are designed for relatively low amplitudes. Do to the mounting is very easy with glue. The sensor has 2m very high rugged and flexible cable this makes it easy to connect the sensor on data acquisition systems. It operates between 8 and 30 VDC unregulated.

As an option, we supply the sensor with connector, Dallas ID or TEDS module. A calibration for the sensor is obligatory.

Specifications

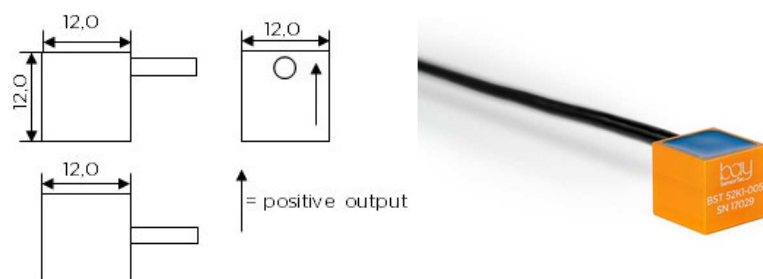
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|-------------------------|--|
| Range | from 2 g to 200 g |
| Supply voltage | 8 to 30 VDC unregulated |
| Power Consumption | max. 7 mA |
| Zero measurement output | +/- 80 mV typ in Differential Mode (≥ 10 g) +/- 200 mV typ in Differential Mode (2g + 5g) 2500 mV DC +/- 150 mV in Single Ended Mode |
| Sensitivity | 20 mV/g up to 4000 mV/g |
| Frequency 5% typ | 0 Hz to 1000 Hz |
| Shock limit | 5000 g |
| Operation Temperature | -20° to 80° C |
| Weight | 3 grams |
| Dimensions | 12,0 x 12,0 x 12.0 mm (l x w x h) |
| Case material | anodized Aluminium |
| Mounting | Glue |



Individual Data

| | | | | | | | |
|------------------|------|------|-------|-------|--------|--------|--------|
| Range g | 2 | 5 | 10 | 25 | 50 | 100 | 200 |
| Frequency Hz | 0-90 | 0-90 | 0-500 | 0-800 | 0-1000 | 0-1000 | 0-1000 |
| Sensitivity mV/g | 2000 | 800 | 400 | 160 | 80 | 40 | 20 |

Dimensions



Cable Code Differential

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

Cable Code Single ended

Red = Excitation + Black = Excitation – Green = Signal

Order Information

BST 52K1-050-2Z
52K1 = Model Name
050 = Range 50 g
2 = 2 m shielded cable
Z = no connector