

## Capacitive Accelerometer

### BST 52K2

uniaxial

#### Features

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

#### Applications

- Train
- Automotive
- Truck and Busses
- Comfort

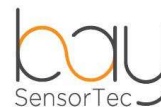
#### Description

The new model BST 52K2 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

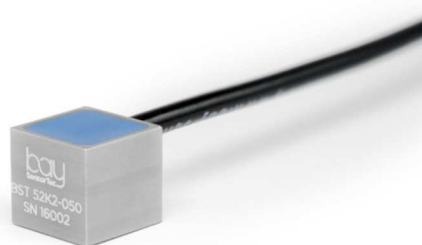
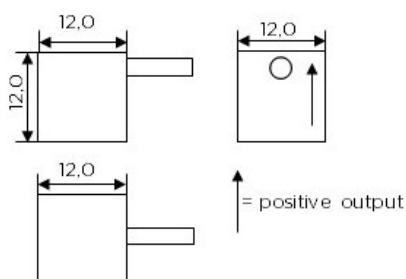
Range	from 1 g to 200 g
Supply voltage	8 to 30 VDC unregulated
Power Consumption	max. 3 mA
Zero measurement output	+/- 50 mV typ in Differential Mode ( $\geq 2$ g) +/- 200 mV typ in Differential Mode (1 g) 2500 mV DC +/- 150 mV in Single Ended Mode
Sensitivity	20 mV/g up to 4000 mV/g
Frequency 5% typ	0 Hz to 1000 Hz
Shock limit	3000 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	1	2	5	10	30	50	100	200
Frequency Hz	0-60	0-90	0-90	0-500	0-800	0-1000	0-1000	0-1000
Sensitivity mV/g	2000	1000	400	200	67	40	20	10

#### 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 52K2-050-2Z**  
52K2 = Model Name  
050 = Range 50 g  
2 = 2 m shielded cable  
Z = no connector