



IEPE Accelerometer

BST 901

uniaxial

Features

- Cubic form
- Side or Top Connector
- Small Size
- TEDS
- Calibration

Application

- Modal and Structure analysis
- Train
- Motion
- Automotive
- Comfort

Description

The new model BST 901 is a small uniaxial accelerometer based on IEPE Shear design with a very good Signal-to-Noise Ratio. The accelerometers are designed for relatively low amplitudes. Do to the mounting with two screws. The sensor has a very high rugged and flexible cable this makes it easy to connect the sensor on data acquisition systems. It operates between 2 and 20 mA constant current. The housing is in Aluminum.

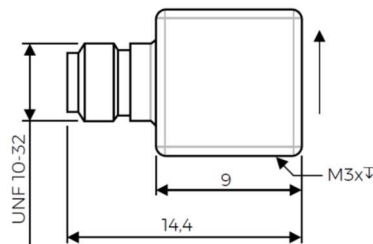
Specifications

Range	55 g and 550 g
Supply constant current	2 to 20 mA
DC Output BIAS Voltage	12 – 14.5 V @ 25° C (+/- 10%)
Shock limit	8000 g
Operation Temperature	-40° to 120° C
Mounting	Mounting-Bolt M3
Weight	2.4 g for 550 g range 3.2 g for 55 g range
Dimensions	9 x 9 x 9 mm (l x w x h)
Case material	Aluminium
Transverse Sensitivity	< 5%
Non-Linearity FSO	2 %
Output Impedance	<100 Ω (I _{const} = 4 mA)
Connector	UNF 10-32

Individual Data

Range	g	55	550	
	m/s ²	490	4900	
Frequency	5% (kHz)	0.45 – 6.0	0.6 – 10.5	
	10% (kHz)	0.3 – 7.5	0.4 – 12	
	3 dB (kHz)	0.15 – 13	0.2 – 18	
Resonance Frequency	+25dB (kHz)	>25	>46	
Sensitivity	mV/g	100	10	
	mV/m/s ²	10.2	1.02	
Phase Response	+/- 5°	1.8 – 3.3 kHz	1.4 – 3.3 kHz	
Noise	µg/√Hz	0.1 Hz	30	200
		1.0 Hz	8	80
		10 Hz	3	30
		100 Hz	0.8	8
Temperature Coefficient	%K	-40 – 0°C	-0.03	0.03
		0 – 40°C	-0.06	+/-0
		40 – 80°C	-0.08	-0.04
		80 – 120°C	-0.11	-0.08
Temperature Sensitivity	ms ² /K	0.3	1.5	

Dimensions



Order Information

BST 901S-010

901 = Model Name
S = Side connector T = Top connector
010 = Sensitivity 10mV/g

Options

TEDS
Cable Length