

1 AXIS AC

1-axis accelerometer, ± 5 g

Description

1 AXIS AC is a compact single axis accelerometer suitable for measurements in the range ± 5 g.

This accelerometer with his low-pass filter limited band from DC to 90 Hz is suitable for vehicle acceleration analysis as well as circuit map identification.

Its sensing elements consists of a micro machined silicon mass suspended by multiple beams from the frame. The full bridge piezoresistors located in the beams change their resistance value due to beams strain. Silicon caps are added on top and bottom of the device to provide over-range mechanical stops.

Sensitive axis is perpendicular to mounting surface.

Each accelerometer includes a detailed calibration sheet that provides test data.

Main Features

- Built-in Damping
- Built-in Over-range Stops
- DC response
- Excellent bias stability
- High shock resistance

Benefits

- Low noise
- Low power
- Miniature size
- Cost effective solution



Typical Applications

Vehicle dynamics

Braking performance

Map navigation

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Technical Characteristics

Measurement range.....	± 5 g
Acceleration limit.....	x 20 FS
Sensitivity (nom)	400 mV/g
Output (ratiometric to supply).....	0.5 to 4.5 V
Non-linearity.....	0.5% FS
Transverse sensitivity (typ)	1% FS
Frequency range.....	DC to 85 Hz
Power supply	5 V
Current supply.....	15 mA
Operating temperature.....	-40 to 125 °C
Temperature error (typ).....	1% FS
Storage temperature	-55 to 150 °C
Cable length.....	500 mm
Weight.....	12 g

Connector Pin Out

Wire colour table	
Red	Supply Voltage
White	+Signal
Black	GND