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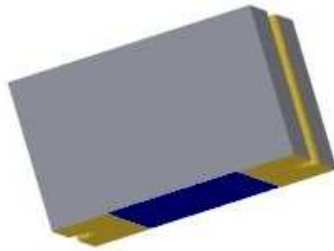
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DATASHEET

Micro Vibration Sensor
MVS0608.02

Revision 2.4
Supersedes data of 2010 Dez. 07

2011 Mar. 22



MVS0608.02

FEATURES

- Omnidirectional vibration sensor
- Wide supply voltage range: 1.80 V to 15 V
- Low operating current
(e.g. I_{cc} max. 0.2 μ A at V_{cc} 2V and R 10Meg)
(e.g. I_{cc} max. 2.0 μ A at V_{cc} 2V and R 1Meg)
- Noiseless
- $R_{On} < 100 \Omega$
- Protected against environmental stress
- Automated SMT-mounting
- RoHS compliant, lead free
- Specified from -20 °C to +70 °C
- Size 2.85 mm x 2.45 mm x 1.7 mm
- Reacting point: approx. 50 mg

APPLICATIONS

- Motion detection
- System wake up – low power

MATERIAL

Package: PCB laminate material
Inner contact material: Gold plated
Ball: Stainless steel, gold plated

DESCRIPTION

The micro vibration sensor is used for the detection of slight movements and vibrations by means of a mobile micro sphere. The ball bridges two contacts reducing the resistance between the two external connection pads from several mega ohms (> 30 MOhm) to below 100 Ohms. The sensor is fully passive, requires no signal conditioning, and operates with currents as low as 0.2 μ A.

With the aid of tool-specific evaluation electronics, the micro vibration sensor controls the operation of movement-sensitive devices. The micro vibration sensor is utilised for converting many systems to environmentally friendly devices by implementing wake-up and power-down logic to conserve battery power and bringing energy consumption to a minimum, pushing the availability of green technology and green electronics into new areas of design and application.

The sensor is typically used for applications such as bike computers, remote controls, electronic lock systems, RFID transponders, GPS tracking systems, wireless sensor networks, illuminated dog`s collars, access control systems, data loggers, bicycle lights, that are only switched on when in motion.