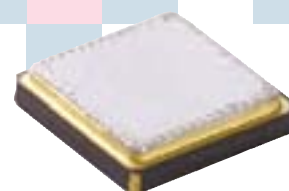
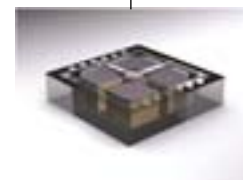


3-Axis Acceleration Sensor **GS3** Element Type

Super-miniature 3-axis acceleration sensor
ideal for use in mobile terminals



GS3
Element Type



MEMS sensor chip
(Piezo resistance method)

Features

- 1. Ultra-compact size**
4.6 (L) x 4.6 (W) x 1.0 mm (H) (typ.)
- 2. High anti-shock characteristic**
5000g
- 3. Functioning 6-axis motion sensor in connection with "AK8971N" 3-axis electronic compass of Asahi Kasei Microsystems Corporation.**

Performance

Item	Specification
Part number	AGS61233
Acceleration detection range	±3g
Operation power supply voltage	2 to 5V DC
Sensor resistance ^{Note 3)}	9.5±1.5kΩ
Sensitivity	X and Y axes: 1 mV/g; Z axis: 1.4 mV/g (typ.)
Temperature sensitivity characteristic	±0.8%/°C
Offset voltage (0 g)	±20mV
Offset voltage temperature characteristic	±1.5%FS/°C
Other axis sensitivity	±6%
Non-linearity ^{Note 4)}	±2%FS
Frequency response	DC to 200Hz
Storage temperature range	-40°C to +85°C
Operation temperature range	-30°C to +85°C
Anti-shock characteristic	5,000g

Notes: 1. The acceleration unit "g" means 9.8 m/s².

2. VDD=3 V when there is no indication.

3. Resistance value between VDD and GND terminals.

4. Maximum error from linear output that connects +3 g and -3 g output.

5. The specifications above are subject to change without notice.

Application examples

Connection to an AK8971N 3-axis electronic compass by Asahi Kasei Microsystems Corporation is required in order to use the GS3 Element Type in mobile phone applications.

▽ Mobile phone GPS navigation



▽ Other mobile phone applications

- Games
- Simplification of key operation
- HDD drop protection
- LCD horizontal/vertical switching
- Pedometers, etc.

3-Axis Acceleration Sensor GS3 Element Type
ASCT1E163E '05.10

New