

# 3-Axis Geomagnetic Sensor for Electronic Compass

NEW  
2011

HSCDTD004A

**Industry's highest azimuth accuracy (\*1), and lowest-ever current consumption.**



### Features

- Output noise reduced approx. 30% compared to the earlier model by optimizing the high-precision magnetic element, enabling higher azimuth accuracy and reduced calibration time.
- $\pm 1.2\text{mT}$  high-precision measurement range improves set layout flexibility within magnetic field environments.
- Proprietary software enables combining of electronic compass functions and 3-axis angular velocity detection in a single device.
- Compatible with I<sup>2</sup>C and SPI interfaces.

### Applications

- Electronic compasses (smartphones, digital still cameras, etc.)
- Motion control (game controllers, head-mounted displays, etc.)

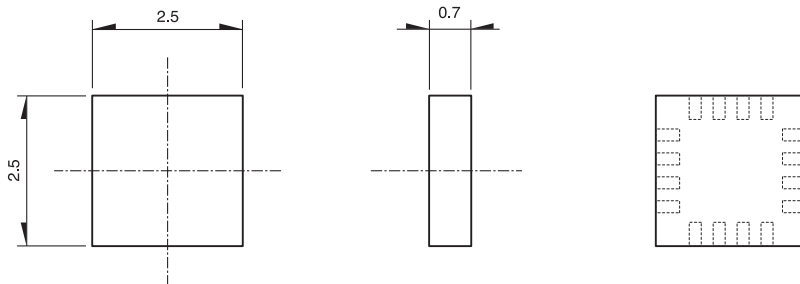
\*1; Azimuth accuracy may be influenced by environmental conditions and other devices.

### Typical Specifications

Items	Specifications
Dimensions ( W x D x H )	2.5 x 2.5 x 0.7mm
Output resolution	0.3 $\mu\text{T}$ / LSB
Measurement range	$\pm 1.2\text{mT}$
Current consumption	200 $\mu\text{A}$ max.
Drive voltage ( Analog; AV <sub>DD</sub> )	2.4 to 3.6V
Drive voltage ( Digital; DV <sub>DD</sub> )	1.7 to AV <sub>DD</sub>
Interface	I <sup>2</sup> C / SPI
Operating temperature range	-30°C to +85°C

### Dimensions

Unit:mm



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