# Using breakthrough technology, we aim for products that will create new markets. New Product News

### **Car Electronics**

# Quartz Angular Rate Sensor for car-navi

The most compact in this category

Industry/Field: AV, Mobile communication, Automotive electronics, Industrial equipment, Amusement

# Compact and light weight, stable output from low to high temperature



#### • Development goals:

Developing the compact and high performance Angular Rate Sensor utilizing the quartz tuning fork

#### • Features:

O

The smallest owing to the quartz tuning fork



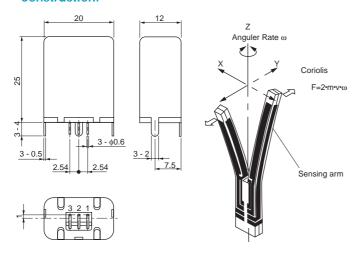
Stable out put due to the single crystal quartz



Digital calibration for DC offset and sensitivity

• Number of industrial property rights: 8

#### • Construction:



#### Characteristics/specifications:

#### Electrical Characteristics

Items	Specifications
Operating Temperature Range	−40 to +85°C
Supply Voltage Range	5.00±0.25V
Zero Point Voltage (-40 to +85°C)	2.5±0.4V
Sensitivity	25mV/deg/s
Frequency Response (7Hz)	> -4dB
Output Voltage Range	0.3 to 4.7V
Output Noise	< 10mVpp

#### Environmental Characteristics

Items	Specifications
LOW Temperature Operation	–40°C for 72h
HIGH Temperature Operation	+85°C for 120h
Heat Shock	-40 to +85°C for 25cycle
Heat and Damp Cycling Test	-10 to +60°C at 90%RH for 5 cycle
Life (Operating Durability)	2Hz, 1×10 <sup>7</sup> cycle

## • Applications/usage examples:

- Detection of a vehicle moving direction fornavigation
- Orientation controls in varieus in industrial equipment

#### Explanation of part numbers:

