

## ADXRS623BBGZ

Data Sheet

Gyroscopes Rollover Detection Gyro +/- 150

Manufacturers Analog Devices, Inc

Package/Case CBGA-32

Product Type Motion & Position Sensors

RoHS Rohs

Lifecycle

Please submit RFQ for ADXRS623BBGZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

Images are for reference only

**RFO** 

## **General Description**

The ADXRS623 is a complete angular rate sensor (gyroscope) that uses the Analog Devices, Inc. surface-micromachining process to create a functionally complete and low cost angularrate sensor integrated with all required electronics on one chip. The manufacturing technique for this device is the same highvolume BiMOS process used for high reliability automotive airbag accelerometers.

The ADXRS623 is an automotive grade gyroscope. Automotive grade gyroscopes have more extensive guaranteed min/max specifications due to automotive testing.

The output signal, RATEOUT (1B, 2A), is a voltage proportional to the angular rate about the axis that is normal to the top surface of the package. The output is ratiometric with respect to a provided reference supply. A single external resistor between SUMJ and RATEOUT can be used to lower the scale factor. An external capacitor sets the bandwidth. Other external capacitors are required for operation.

A temperature output is provided for compensation techniques. Two digital self-test inputs electromechanically excite thesensor to test proper operation of both the sensor and the signal conditioning circuits. The ADXRS623 is available in a 7 mm × 7 mm × 3 mm BGA chip scale package.

**Features** 

Complete rate gyroscope on a single chip

Z-axis (yaw rate) response

High vibration rejection over wide frequency

2000 g powered shock survivability

Ratiometric to referenced supply

5 V single-supply operation

105°C operation

Self-test on digital command

Ultrasmall and light (<0.15 cc, <0.5 gram)

Temperature sensor output

RoHS compliant

## **Related Products**



ADXL343BCCZ Analog Devices, Inc LGA-14



ADXL103CE Analog Devices, Inc CLCC-8



ADXRS642BBGZ Analog Devices, Inc CBGA-32



ADXL346ACCZ-RL7 Analog Devices, Inc LGA16

## **Application**

Inertial measurement units

Platform stabilization

Robotics



ADXL335BCPZ-RL7 Analog Devices, Inc LFCSP16



ADIS16488BMLZ Analog Devices, Inc MSM24



ADXL357BEZ Analog Devices, Inc LCC-14



ADXL345BCCZ-RL7 Analog Devices, Inc LGA-14