



*For immediate release*

## **AECQ100-Qualified Hall Effect IC Family from Diodes Incorporated Offers Wide Choice of Switching Sensitivities**

**Plano, Texas – January 11, 2017** – Diodes Incorporated (Nasdaq: DIOD), a leading global manufacturer and supplier of high-quality application specific standard products within the broad discrete, logic, analog and mixed-signal semiconductor markets, today introduced the AH336xQ and AH339xQ series. This new family of high-voltage, unipolar Hall effect switch ICs targets automotive applications and is qualified to AECQ100 Grade-0, plus offers a wide range of operating sensitivities. Designed for position and proximity sensing in applications such as seat buckle fastening, door and trunk open, close and lock function detection, and the position of gear stick, wipers, mirrors and valves, the AH336xQ and AH339xQ series contactless switches meet end-use requirements both within the vehicle cabin and engine compartment.

The AH336xQ and AH339xQ are activated when a magnetic south pole of sufficient strength is presented perpendicular to the package. These Hall effect ICs switch on when the magnetic flux density exceeds the defined operating threshold (BOP) and switch off when the flux density falls below the release threshold (BRP). Ten sensitivity options, ranging from a highly sensitive 30G BOP device to a low-sensitivity 275G BOP version, address the needs of a wide range of automotive applications. The BOP and BRP thresholds provide a tight operating window with adequate hysteresis for reliable operation, while a low temperature coefficient ensures the stability of the switching points. A chopper-stabilized design minimizes offsets with fast power on and response times, which are particularly important in reducing sensing delays and accuracy errors. In addition to the SOT23 package, the AH3362Q/3Q/5Q/6Q and AH3390Q are also offered in an SC59 package that provides the opposite polarity for magnetic flux detection.

The AH336xQ and AH339xQ Hall effect ICs are designed to operate over a wide 3.0V to 28V supply voltage range and over a -40°C to +150°C temperature range,

providing a robust solution for use in the intended harsh automotive environment. Reliability and ease of handling during end-equipment manufacture is further enhanced by a reverse-blocking diode and Zener clamps on the supply and output pins; protection from ESD exceeds 8kV HBM and 2kV CDM. An open-drain output provides end-design flexibility and low-current consumption with an accurate current limit.

The AH336xQ and AH339xQ series devices are offered in small footprint, 3-pin SC59, SOT23 and SIP-3 packages. For further information, visit the Company's website at [www.diodes.com](http://www.diodes.com).

### **About Diodes Incorporated**

Diodes Incorporated (Nasdaq: DIOD), a Standard and Poor's SmallCap 600 and Russell 3000 Index company, is a leading global manufacturer and supplier of high-quality application specific standard products within the broad discrete, logic, analog and mixed-signal semiconductor markets. Diodes serves the consumer electronics, computing, communications, industrial, and automotive markets. Diodes' products include diodes, rectifiers, transistors, MOSFETs, protection devices, function-specific arrays, single gate logic, amplifiers and comparators, Hall-effect and temperature sensors, power management devices, including LED drivers, AC-DC converters and controllers, DC-DC switching and linear voltage regulators, and voltage references along with special function devices, such as USB power switches, load switches, voltage supervisors, and motor controllers. Diodes' corporate headquarters and Americas' sales office are located in Plano, Texas and Milpitas, California. Design, marketing, and engineering centers are located in Plano; Milpitas; Taipei, Taiwan; Taoyuan City, Taiwan; Zhubei City, Taiwan; Manchester, England; and Neuhaus, Germany. Diodes' wafer fabrication facilities are located in Kansas City, Missouri and Manchester, with an additional facility located in Shanghai, China. Diodes has assembly and test facilities located in Shanghai, Jinan, Chengdu, and Yangzhou, China, as well as in Hong Kong, Neuhaus and Taipei. Additional engineering, sales, warehouse, and logistics offices are located in Taipei; Hong Kong; Manchester; Shanghai; Shenzhen, China; Seongnam-si, South Korea; and Munich, Germany, with support offices throughout the world.

Recent news releases, annual reports and SEC filings are available at the Company's website: <http://www.diodes.com>. Written requests may be sent directly to the Company, or they may be e-mailed to: [diodes-fin@diodes.com](mailto:diodes-fin@diodes.com).

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