

## Super Barrier Rectifier Technology from Diodes Incorporated Improves Efficiency and Reliability of Automotive Daytime Running Lights

**Plano, TX – May 22, 2019 –** Diodes Incorporated (Nasdaq: DIOD) today introduced the SBR10M100P5Q and SBR8M100P5Q. These automotive-compliant super barrier rectifier (SBR®) diodes employ patented and proprietary technology and can significantly reduce power loss and lower operating temperatures in automotive applications. When used as a recirculating diode in DC-to-DC buck-boost converters for automotive daytime running light (DRL) applications, these devices can improve system efficiency by up to 5% while reducing operating temperatures by up to 5°C.

The SBR10M100P5Q (10A, 100V) and SBR8M100P5Q (8A, 100V) feature low forward voltage drop, ultra-low reverse leakage, and fast switching speeds; these combine to reduce system efficiency losses by up to 30%. When compared to traditional Schottky barrier diode technology, these devices improve energy consumption and reduce running costs. Generating less heat reduces the cost of cooling components and provides a more reliable end product.

SBR technology is a drop-in replacement for existing Schottky diodes; it can deliver immediate benefits without any costly redesign effort, and reduces time to market for existing systems that need to meet more stringent limits.

In addition to DRL, the SBR10M100P5Q and SBR8M100P5Q can be deployed in other applications as they deliver superior efficiency and reliability performance over Schottky diodes in polarity protection, switching and blocking, as well as AC-DC and DC-DC conversion.

The SBR10M100P5Q and SBR8M100P5Q SBR diodes are automotive-compliant to AEC-Q101 and can be supplied in accordance with PPAP requirements. They are available in the efficient PowerDI $^{\otimes}$ 5 package. Further information is available at www.diodes.com.

SBR and PowerDI are registered trademarks of Diodes Incorporated.

## **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 also has timing, connectivity,

switching, and signal integrity solutions for high-speed signals. 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 Manchester and Greenock, UK, and 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.

###

## **Company Contact:**

Diodes Incorporated
Emily Yang
VP, Worldwide Sales and Marketing

P: 972-987-3900

E: pressinquiries@diodes.com

## **Investor Relations Contact:**

Shelton Group Leanne K. Sievers EVP, Investor Relations

P: 949-224-3874

E: <u>lsievers@sheltongroup.com</u>