



***For immediate release***

## **Offline Buck Converter for the IoT Applications from Diodes Incorporated**

**Plano, TX – July 12, 2018** – 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 announced the AL17050 universal offline buck converter designed for low-power Internet-of-Things (IoT) applications. With its wide AC input voltage range and fully integrated MOSFET, it provides a compact and efficient solution to generating a constant voltage for low-power applications that need to comply with strict standby power restrictions.

The AL17050 has been developed to accept an AC input voltage between 85V<sub>AC</sub> and 265V<sub>AC</sub>, making it suitable for any region. The internal MOSFET is able to withstand voltages of up to 500V yet is optimized for low-power applications, meaning the device only consumes 100µA of static current. Furthermore, the device automatically adjusts to low loads, so it delivers excellent overall efficiency.

The non-isolated design minimizes the BoM for manufacturers developing applications for the IoT, such as smart appliances, smart sensors, and connected lighting. The AL17050 delivers a constant 3.3V/5V at up to 60mA, making it ideal for devices based on low power microcontrollers (MCUs) that integrated IoT connectivity such as Bluetooth<sup>®</sup> LE or Zigbee<sup>™</sup>.

Using the AL17050, manufacturers will be able to develop IoT applications that are powered directly from a high-voltage AC supply yet deliver outstanding power efficiency. With the number of devices in the IoT expected to rise to many billions in the next few years, energy efficiency is now a major design consideration.

Alongside its excellent regulation and high-power efficiency, the AL17050 also integrates protection against over-temperature, over-load, output-short, and open-loop conditions. It is available in the SOT25 package and requires very few additional components in a buck converter configuration, making it suitable for small products where space is often limited.

Further information is available at [www.diodes.com](http://www.diodes.com)

*Bluetooth is a registered trademark of Bluetooth SIG.*

*Zigbee is a trademark of the Zigbee Alliance.*

## **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 facility is located in 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).

###

### **Company Contact:**

Diodes Incorporated  
Emily Yang  
VP, Worldwide Sales and Marketing  
P: 972-987-3900  
E: [pressinquiries@diodes.com](mailto:pressinquiries@diodes.com)

### **Investor Relations Contact:**

Shelton Group  
Leanne K. Sievers  
EVP, Investor Relations  
P: 949-224-3874  
E: [lsievers@sheltongroup.com](mailto:lsievers@sheltongroup.com)