

## Industrial-Grade Silicon Carbide MOSFET from Diodes Incorporated Enables Higher Power Density

**Plano, Texas – March 30, 2023 –** Diodes Incorporated (Diodes) (Nasdaq: DIOD) introduces the latest addition to its portfolio of Silicon Carbide (SiC) products: the <a href="https://doi.org/10.2011/00.500/">DMWS120H100SM4</a> N-channel SiC MOSFET. This device addresses demand for higher efficiency and higher power density for applications such as industrial motor drives, solar inverters, data center and telecom power supplies, DC-DC converters, and electric vehicle (EV) battery chargers.

The DMWS120H100SM4 operates at a high voltage (1200V) and drain current (up to 37A) while maintaining low thermal conductivity ( $R_{\theta JC} = 0.6^{\circ}$ C/W), making it well-suited for applications running in harsh environments. This MOSFET has a low  $R_{DS(ON)}$  (typical) of only  $80m\Omega$  (for a 15V gate drive) to minimize conduction losses and provide higher efficiency. In addition, the device has a gate charge of only 52nC to reduce switching losses and lower the package temperature.

This product is the first SiC MOSFET on the market in a TO247-4 package. The additional Kelvin sense pin can be connected to the source of the MOSFET to optimize the switching performance, thereby enabling even higher power densities.

The DMWS120H100SM4 is available at \$21.50 in 20 piece quantities.

## **About Diodes Incorporated**

Diodes Incorporated (Nasdaq: DIOD), a Standard and Poor's SmallCap 600 and Russell 3000 Index company, delivers high-quality semiconductor products to the world's leading companies in the automotive, industrial, computing, consumer electronics, and communications markets. We leverage our expanded product portfolio of discrete, analog, and mixed-signal products and leading-edge packaging technology to meet customers' needs. Our broad range of application-specific solutions and solutions-focused sales, coupled with worldwide operations of 32 sites, including engineering, testing, manufacturing, and customer service, enables us to be a premier provider for high-volume, high-growth markets. For more information visit <a href="https://www.diodes.com">www.diodes.com</a>.

The Diodes logo is a registered trademark of Diodes Incorporated in the United States and other countries.

All other trademarks are the property of their respective owners.

© 2023 Diodes Incorporated. All Rights Reserved.

## **Company Contact:**

Diodes Incorporated **Emily Yang** SVP, Worldwide Sales and Marketing P: 972-987-3900

**Contact Us** 

## **Investor Relations Contact:**

Shelton Group Leanne K. Sievers President

P: 949-224-3874

E: <a href="mailto:lsievers@sheltongroup.com">lsievers@sheltongroup.com</a>