

Littelfuse Inc.
8755 West Higgins Road, Suite 500
Chicago, Illinois 60631
p: (773) 628-1000 f: (773) 628-0802
www.littelfuse.com

FOR IMMEDIATE RELEASE

Media Contact:

Kristina Hodgson
Global Marketing Communications Manager
Electronics Business Unit, Littelfuse, Inc.

KHodgson@littelfuse.com

twitter.com/littelfuse



Click to download a high resolution image:
[650V Series SiC Schottky Diodes](#)

GEN2 650V SiC Schottky Diodes Offer Improved Efficiency, Reliability and Thermal Management

Negligible reverse recovery current, high surge capability, and 175°C max. operating junction temperature

CHICAGO, February 11, 2019 — Littelfuse, Inc. today introduced two second-generation series of 650V, AEC-Q101-qualified silicon carbide (SiC) Schottky Diodes. The LSIC2SD065CxxA and LSIC2SD065AxxA Series SiC Schottky Diodes are available with a choice of current ratings (6A, 8A, 10A, 16A or 20A). They offer power electronics system designers a variety of performance advantages, including negligible reverse recovery current, high surge capability, and a maximum operating junction temperature of 175°C, so they are ideal for applications that require enhanced efficiency, reliability, and thermal management.

When compared to standard silicon PN-junction diodes, the 650V Series SiC Schottky Diodes support dramatic reductions in switching losses and substantial increases in the efficiency and robustness of a power electronics system. Because they dissipate less energy and can operate at higher junction temperatures than Si-based solutions, they allow for smaller heat sinks and a smaller system footprint. This provides end-users with all the advantages of more compact, energy-efficient systems and the potential for a lower total cost of ownership.

Typical applications for 650V Series SiC Schottky Diodes include:

- power factor correction (PFC),
- buck/boost stages in DC-DC converters,
- free-wheeling diodes in inverter stages,
- high-frequency output rectification and
- electric vehicle (EV) applications.

“These new series are our first 650V SiC Schottky Diode offerings; all our previous releases were 1200V-rated devices, so we can now address a wider range of applications and further complement the Littelfuse SiC MOSFET portfolio,” said Christophe Warin, Silicon Carbide Product Marketing Manager, Semiconductor Business Unit at Littelfuse. “Their AEC-Q101 qualification puts these diodes in a higher class than similar devices in terms of quality and reliability.”

The 650V Series SiC Schottky Diodes offer these key benefits:

- AEC-Q101-qualified diodes exhibit exceptional performance in demanding applications.
- Far lower switching losses than silicon bipolar diodes and fast, temperature-independent switching behavior make these devices suitable for high-frequency power switching.
- The positive temperature coefficient enables safe operation and ease of paralleling.
- The 175°C maximum operating junction temperature provides a larger design margin and relaxed thermal management requirements.

Availability

LSIC2SD065CxxA Series SiC Schottky Diodes are available in TO-252-2L (DPAK) packages, in tape and reel format, with a minimum order quantity of 2,500 devices. LSIC2SD065AxxA Series SiC Schottky Diodes are available in TO-220-2L packages, with 50 devices packed in a tube, with a minimum order quantity of 1,000 pieces. Sample requests may be placed through authorized Littelfuse distributors worldwide. For a listing of Littelfuse distributors, please visit Littelfuse.com.

For More Information

Additional information is available on the [LSIC2SD065CxxA Series SiC Schottky Diodes product page](#) and [LSIC2SD065AxxA Series SiC Schottky Diodes product page](#). For technical questions, please contact: Christophe Warin, Silicon Carbide Product Marketing Manager, Semiconductor Business Unit at Littelfuse, cwarin@littelfuse.com.

About Littelfuse

Littelfuse (NASDAQ: LFUS) is a global manufacturer of leading technologies in circuit protection, power control and sensing. Sold in over 150 countries, our products are found in automotive and commercial vehicles, industrial applications, data and telecommunications, medical devices, consumer electronics and appliances. Our 12,000 worldwide associates partner with customers to design, manufacture and deliver innovative, high-quality solutions, for a safer, greener and increasingly connected world – everywhere, every day. Learn more at Littelfuse.com.

###