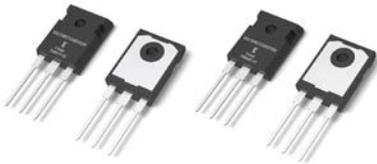


Littelfuse Inc.
8755 West Higgins Road, Suite 500
Chicago, Illinois 60631
p: (773) 628-1000 f: (773) 628-0802
www.littelfuse.com

FOR IMMEDIATE RELEASE

Media Contact:

Rhonda Stratton
Global Marketing Communications Manager
Electronics Products, Littelfuse, Inc.
773-628-0644
rstratton@littelfuse.com
twitter.com/littelfuse



[LSIC1MO120E0120](#) and
[LSIC1MO120E0160](#) SiC MOSFETs

Littelfuse Introduces 1200V SiC MOSFETs with Ultra-Low On-Resistances at APEC 2018

Designed to outperform silicon MOSFETs and IGBTs for ultra-fast switching in power conversion systems

CHICAGO, March 6, 2018 — Littelfuse, Inc., the global leader in circuit protection, and Monolith Semiconductor Inc., a Texas-based company developing silicon carbide technology, today added two 1200V silicon carbide (SiC) n-channel, enhancement-mode MOSFETs to their expanding first-generation portfolio of power semiconductor devices. These new SiC MOSFETs are the latest products of a strategic partnership that Littelfuse formed with Monolith in 2015 to develop power semiconductors for industrial and automotive markets. The announcement was made in the Littelfuse booth at the Applied Power Electronics Conference & Exposition (APEC 2018).

The LSIC1MO120E0120 and LSIC1MO120E0160 SiC MOSFETs offer ultra-low on-resistance ($R_{DS(ON)}$) levels of just 120 milliohms and 160 milliohms respectively. These SiC MOSFETs are designed for use as power semiconductor switches in a wide range of various power conversion systems, outperforming their silicon MOSFET counterparts substantially in terms of blocking voltage, specific-on resistance, and junction capacitances. They also offer a combination of high operating voltages and ultra-fast switching that traditional power transistor solutions such as silicon IGBTs with similar current ratings and packages can't match.

Typical applications for these new SiC MOSFETs include:

- Electric vehicles.
- Industrial machinery.
- Renewable energy (e.g., solar inverters).
- Medical equipment.
- Switch-mode power supplies.
- Uninterruptible power supplies (UPSs).
- Motor drives.
- High-voltage DC/DC converters.
- Induction heating.

“These new SiC MOSFETs provide power converter designers with a state-of-the-art alternative to traditional silicon-based transistors,” said Michael Ketterer, product marketing manager for Power Semiconductors at Littelfuse. “Their inherent material characteristics and ultra-fast switching capabilities offer a variety of design optimization opportunities including increased power density, higher efficiency, and the potential for lower bill-of-material costs.”

The new 1200V SiC MOSFETs offer these key benefits:

- A reduction in passive filter components at the system level supports increased power density, for a design that’s optimized for use in high-frequency, high-efficiency applications.
- Extremely low gate charge and output capacitance combined with ultra-low on-resistance allows for minimal power dissipation, higher efficiency and a reduction in the size and sophistication of the cooling techniques required.

Availability

LSIC1MO120E0120 and LSIC1MO120E0160 SiC MOSFETs are available in TO-247-3L packages in tubes in quantities of 450. 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 [LSIC1MO120E0120](#) and [LSIC1MO120E0160](#) SiC MOSFETs product page. For technical questions, please contact: Michael Ketterer, product marketing manager for Power Semiconductors at Littelfuse, mketterer@littelfuse.com.

About Littelfuse

Founded in 1927, Littelfuse is the global leader in circuit protection with advancing platforms in power control and sensor technologies. The company serves customers in the electronics, automotive and industrial markets with products that include fuses, semiconductors, polymers, ceramics, relays and sensors. Littelfuse has more than 11,000 employees in more than 50 locations worldwide. For more information, please visit Littelfuse.com.

LFUS-P

###