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Alpha and Omega Semiconductor Announces New 1200V, 40A H1 IGBT Optimized for High Switching Frequency Applications

Delivers the ideal combination of high-performance and cost competitiveness

SUNNYVALE, Calif., Sept. 12, 2017 (GLOBE NEWSWIRE) -- [Alpha and Omega Semiconductor Limited](#) (AOS) (Nasdaq:AOSL), a designer, developer and global supplier of a broad range of power semiconductors and power ICs, is expanding its recently launched fast turn-off switched 650V H-series IGBT family with a 1200V rating. The new [AOK40B120H1](#) has been developed to address needs of industrial welding and high-frequency converters with 3-phase ac or high voltage dc input. The device offers excellent performance in high switching frequency applications, which can be a perfect fit for high voltage industrial welding machines.

A photo accompanying this announcement is available at

<http://www.globenewswire.com/NewsRoom/AttachmentNg/65377b68-e7a4-441b-be2c-c228c6a7614c>

The AOK40B120H1 has been designed with AOS' patent pending AlphaIGBT™ technology platform and features industry-leading fast turn-off as well as low $V_{CE(SAT)}$ of 1.8V, which reduces power losses incurred during conduction and switching. Also, the 1200V minimum BV_{CES} rating and high latch-up ruggedness enable a larger safety application design.

"The AOK40B120H1 comprehensively addresses the needs of 1200V discrete IGBT-based welding system designers. High performance such as low $V_{CE(SAT)}$ and low loss of turn-off switching behaviors ensure reliable and highly efficient operation, allowing designers to take advantage of cost effectiveness," said Dr. Brian Suh, Vice President of IGBT product line at AOS. "AOS IGBTs are uniquely positioned to address customer pain points with innovative technology and solutions."

1200V H1-Series Highlights

- | 1200V IGBTs with soft and fast freewheeling diode
- | Fast turn-off switching performance
- | Low $V_{ce(sat)}$

AOK40B120H1 Technical Specs

- | $V_{CE} = 1200V$
- | $I_C = 40A$
- | $V_{CE(SAT)} = 1.8V @ T_J = 25^\circ C$
- | $E_{OFF} = 1.24mJ @ T_J = 25^\circ C$
- | $T_{J(max)} = 175^\circ C$

Pricing and Availability

The AOK40B120H1 is immediately available in production quantities with a lead-time of 12-14 weeks. The unit price for 10,000 pieces is \$3.00

About AOS

Alpha and Omega Semiconductor Limited, or [AOS](#), is a designer, developer and global supplier of a broad range of power semiconductors, including a wide portfolio of [Power MOSFET](#), [IGBT](#), [Power IC](#) and [IPM](#) products. AOS has developed extensive intellectual property and technical knowledge that encompasses the latest advancements in the power semiconductor industry, which enables us to introduce innovative products to address the increasingly complex power requirements of advanced electronics. AOS differentiates itself by integrating its Discrete and IC semiconductor process technology, product design, and advanced packaging know-how to develop high performance power management solutions. AOS' portfolio of products targets high-volume applications, including portable computers, flat panel TVs, LED lighting, smart phones, battery packs, consumer and industrial motor controls and power supplies for TVs, computers,

servers and telecommunications equipment. For more information, please visit www.aosmd.com.

Forward Looking Statements

This press release contains forward-looking statements that are based on current expectations, estimates, forecasts and projections of future performance based on management's judgment, beliefs, current trends, and anticipated product performance. These forward-looking statements include, without limitation, references to the efficiency and capability of new products, and the potential to expand into new markets. Forward looking statements involve risks and uncertainties that may cause actual results to differ materially from those contained in the forward-looking statements. These factors include, but are not limited to, the actual product performance in volume production, the quality and reliability of the product, our ability to achieve design wins, the general business and economic conditions, the state of the semiconductor industry, and other risks as described in the Company's annual report and other filings with the U.S. Securities and Exchange Commission. Although the Company believes that the expectations reflected in the forward looking statements are reasonable, it cannot guarantee future results, level of activity, performance, or achievements. You should not place undue reliance on these forward-looking statements. All information provided in this press release is as of today's date, unless otherwise stated, and AOS undertakes no duty to update such information, except as required under applicable law.

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