

FOR IMMEDIATE RELEASE

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Alpha and Omega Semiconductor Introduces New 650V H2-series IGBTs Improved for High-Speed Switching Applications

High-speed switching performance for overall system efficiency and reliability

SUNNYVALE, Calif., Nov. 9, 2016 – [Alpha and Omega Semiconductor Limited](#) (AOS) (Nasdaq: AOSL), a designer, developer and global supplier of a broad range of power semiconductors and power ICs, today announced the release of [AOK40B65H2AL](#), the introductory device in the new 650V H2-series IGBT family. The AOK40B65H2AL has been optimized to deliver high-speed switching performance by improving fast turn-off switching in applications such as welding machines, power factor correction and high switching converters.

AOK40B65H2AL has been designed with the latest patent pending AlphaIGBT™ technology platform and features industry-leading fast turn-off and offers low $V_{CE(SAT)}$ at 2.05V, which reduces power loss incurred during conduction and switching. The 650V minimum BV_{CES} rating and solid BV performance allow for a larger safety margin to prevent sudden damage from voltage transients. Furthermore, low turn-on di/dt and high turn-on dv/dt switching performance enable lower EMI design effectively.

“IGBT-driven fast switching converters have been widely used in welding machines, power factor correction, renewable energy applications and so on. Due to higher efficiency, system cost reduction and power quality regulation requirements, the proper selection of the IGBT is crucial to achieving the overall system efficiency robustness, EMI management and long-term reliability.” said Dr. Brian Suh, Vice President of IGBT product line at AOS. The 650V H2-series offers designers the ideal combination for higher efficiency, high ruggedness and EMI performance.

650V H2-Series Highlights

- 650V IGBTs with soft and fast freewheeling diode
- Fast turn-off switching performance
- Excellent turn-on performance by low di/dt and high dv/dt

AOK40B65H2AL Technical Specs

- $V_{CE} = 650V$
- $I_C = 40A$
- $V_{CE(SAT)} = 2.05V$
- $E_{OFF} = 0.54mJ @T_J = 25^{\circ}C$
- $t_{D(OFF)} = 117ns, t_{OFF} = 16ns @T_J = 25^{\circ}C$
- $T_{J(max)} = 150^{\circ}C$

Pricing and Availability

The AOK40B65H2AL is immediately available in production quantities with a lead-time of 12-14 weeks. The unit price for 10,000 pieces is \$1.1.

About AOS

Alpha and Omega Semiconductor Limited, or [AOS](http://www.aosmd.com), is a designer, developer and global supplier of a broad range of power semiconductors, including a wide portfolio of [Power MOSFET](#), [IGBT](#) and [Power IC](#) 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's 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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