

# Photo Release -- Alpha and Omega Semiconductor Debuts New 1350V IGBT Optimized for Induction Heating Applications

## Lowest Saturation Voltage and Superior Switching Performance Enable Higher Efficiencies

SUNNYVALE, Calif., May 1, 2014 (GLOBE NEWSWIRE) -- <u>Alpha and Omega Semiconductor Limited</u> (AOS) (Nasdaq:AOSL), a designer, developer and global supplier of a broad range of power semiconductors and power ICs, today announced the release of AOK20B135D1, the flagship device in its new 1350V AlphaIGBT™ portfolio. The AOK20B135D1 has been optimize to deliver high performance in soft switching home appliance applications such induction cooking, rice cookers and inverter-based microwave ovens.

A photo accompanying this release is available at <a href="http://www.globenewswire.com/newsroom/prs/?pkgid=25076">http://www.globenewswire.com/newsroom/prs/?pkgid=25076</a>

AOK20B135D1 is built upon the latest patent pending AlphaIGBT technology platform and features industry-leading low  $V_{CE}$  (SAT) and fast turn-off that reduces the power losses incurred during conduction and switching. The 1350V minimum  $BV_{CES}$  rating allows for a larger safety margin to prevent avalanche destruction from voltage transients. Furthermore, EMI is reduced as a result of very smooth turn-off current waveforms.

"Induction heating-based applications offer higher efficiencies and faster cooking times compared to traditional heating methods that use electric coils or a gas flame for heat generation. The proper selection of the IGBT is critical to achieve the overall system efficiency and long term reliability," said Dr. Brian Suh, Vice President of Medium and High Voltage Discrete Product Lines at AOS. "AOK20B135D1 offers designers the ideal combination of low V<sub>CE(SAT)</sub> and optimal switching characteristics to generate less heat and improve overall system performance."

#### AOK20B135D1 Technical Highlights

- 1350V IGBT with freewheeling diode in a TO-247 package
- V<sub>CE(SAT)</sub> = 1.57V typ (lowest in the industry)
- $V_F = 1.46V \text{ typ}$
- $I_C (100^{\circ}C) = 20A$
- E<sub>OFF</sub> = 1.05mJ
- $T_{J(max)} = 175^{\circ}C$

### **Pricing and Availability**

The AOK20B135D1 is immediately available in production quantities with a lead-time of 12-14 weeks. The unit price for 10,000 pieces is \$2.09.

#### **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 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 <a href="https://www.aosmd.com">www.aosmd.com</a>.

## **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.

The photo is also available via AP PhotoExpress.

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AOS 1350V IGBT