

FOR IMMEDIATE RELEASE

Media Contact: Mina Galvan
Tel: 408.789.3233
Email: mina.galvan@aosmd.com

Alpha and Omega Semiconductor Announces Ultra-Low Reverse Working Voltage TVS Diode for USB4 and Thunderbolt 4 ESD Protection

SUNNYVALE, Calif., Sep. 20, 2023 – [Alpha and Omega Semiconductor Limited](#) (AOS) (Nasdaq: AOSL), a designer, developer, and global supplier of a broad range of discrete power devices, wide band gap power devices, power management ICs and modules, today announced the release of its [AOZ8S207BLS-01](#) Ultra-Low Reverse Working Voltage (V_{RWM}) transient voltage suppressor (TVS) diode. Designed to deliver extremely low capacitance and fast response time, the AOZ8S207BLS-01 TVS diode offers superior high-speed data line protection based on AOS' advanced Ultra-Low Breakdown Voltage (V_{BR}) TVS platform and innovative packaging. These features, along with the TVS diode's 0.15pf capacitance, make it ideal for USB4 and Thunderbolt 4 electrostatic discharge (ESD) protection.

Low breakdown voltage is essential for ESD protection devices, especially when protecting ICs manufactured with the finest process. AOZ8S207BLS-01 features an especially low breakdown voltage, and it can provide a faster response time compared to conventional snap-back devices, enabling it to absorb ESD energy extremely quickly to avoid damage to the IC and surrounding components. In addition, the AOZ8S207BLS-01 is a single-channel device housed in a 0.6x0.3mm leadless Surface-Mounted Device (SMD) package, so it is particularly well-suited to meet the small footprint requirements of USB Type-C connectors.

“As the leading developer and supplier of ESD protection solutions in high-speed interfaces such as USB, HDMI, and Thunderbolt, this new TVS platform builds on our state-of-the-art portfolio to give our customers a much better figure of merit (FOM) on clamping voltage times capacitance. In addition to low capacitance, having a lower clamping voltage and faster response during an ESD event is important to protect today's more ESD-sensitive chipsets. This feature-rich TVS diode makes an excellent solution for high-speed data line protection,” said Charles Chen, Marketing Director at AOS. “We believe our new competitive platform will help our partners and customers to greatly reduce ESD failure rates in their electronic products.”

Technical Highlights

Part Number	Channel	V_{RWM} (V) Max.	Rated I_{PP} (A) Max.	Capacitance C_J (pF) Typ.	V_{CL} (V) at $I_{TLP}=16A$ Typ.	Application
AOZ8S207BLS-01	1	1	5.0	0.15	7	Thunderbolt 4, USB4

-more-

Pricing and Availability

The AOZ8S207BLS-01 TVS diode is immediately available in production quantities with a lead time of 16 weeks. The price in 1,000-piece quantities is \$66.00.

About AOS

Alpha and Omega Semiconductor Limited, or [AOS](#), is a designer, developer, and global supplier of a broad range of discrete power devices, wide band gap power devices, power management ICs, and modules, including a wide portfolio of [Power MOSFET](#), [SiC](#), [IGBT](#), [IPM](#), [TVS](#), [Gate Drivers](#), [Power IC](#), and [Digital Power](#) 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, smartphones, battery packs, consumer and industrial motor controls, automotive electronics, 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.

###