Vishay Intertechnology to Bring Industry-Leading SiC MOSFET Technology to APEC 2025

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To Address the Latest Trends in Power Electronics, Company to Showcase MaxSiC™ Series SiC MOSFETs Alongside Broad Portfolio of Passive and Semiconductor Solutions

MALVERN, Pa., March 11, 2025 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today announced that at the Applied Power Electronics Conference and Exposition (APEC) 2025, the company will be showcasing its broad portfolio of passive and semiconductor solutions that address the latest trends in power electronics — from energy harvesting, electric vehicle (EV) powertrains, and battery technologies to high efficiency power conversion for data centers.

Taking center stage in booth 905 will be Vishay's newly released 1200 V MaxSiC™ series silicon carbide (SiC) MOSFETs, which deliver on-resistances of 45 mΩ, 80 mΩ, and 250 mΩ in standard packages for industrial applications, with custom products also possible. In addition, Vishay will provide a portfolio roadmap for 650 V to 1700 V SiC MOSFETs with on-resistances ranging from 10 mΩ to 560 Ω. Vishay's SiC platform is based on a proprietary MOSFET technology — enabled through the company's acquisition of MaxPower Semiconductor, Inc. — which will address market demands in traction inverter, photovoltaic energy storage, on-board charger, and charging station applications.

In booth 419, Vishay will be highlighting high energy PTC and NTC inrush current limiting solutions from the company's most recent acquisition: Ametherm. They include a PTC matrix capable of withstanding 1500 VDC and 1125 J. Vishay Ametherm products are well-suited to growing industries and applications, such as robotic automation, industrial power supplies and motor drives, power distribution for server and AI cloud computing, LED lighting systems, medical devices, imaging equipment, electric vehicle charging, and alternative energy infrastructure.

At APEC 2025, Vishay will also be offering a variety of product-focused demonstrations highlighting IHLE® series low profile, high current inductors featuring integrated E-field shields; the THJP ThermaWick® Thermal Jumper; the pulse performance of MELF, CRCW / CRCW-HP thick film, and MCS, MCU, and MCW thin film chip resistors; and the thermal capabilities of the PCAN and RCP high power thin and thick film resistors. In addition, automotive-focused application demonstrations will include:

- An intelligent battery shunt built on WSBE Power Metal Strip® resistors, with low TCR and a CAN FD / USB interface for 400 V / 800 V systems
- A 48 V eFuse featuring TrenchFET® MOSFETs designed to handle a continuous current up to 100 A and operate continuously at maximum current with less than 14 W of losses
- A 1 kW, 48 V / 12 V buck-boost converter featuring two module power stages — each rated for 500 W — in a compact form factor

Additional Vishay passive components on display at APEC 2025 will include the IHDM series of high current, edge-wound through hole inductors with continuous operation to +180 °C; hybrid planar and integrated transformers; wireless charging coils; sensing NTC and PTC thermistors, including the PTCEL series capable of handling energy absorption up to 240 J; Power Metal Strip resistors with high power to 9 W and shunts with low TCR down to < ± 10 ppm/°C; high power wirewound, thin film, and thick film resistors, including the anti-surge RCS with power to 0.5 W in the 0805 case size; high frequency thick film resistors with up to 500 000 thermal cycles; high voltage thick film resistors and dividers; high voltage aluminum, ceramic, and power electronic capacitors (PEC); high capacity energy storage capacitors; military-grade, high energy, and hermetically sealed tantalum capacitors; and robust metallized polypropylene film capacitors, including the MKP1848e DC-Link capacitor with high temperature operation to +125 °C.

Highlighted Vishay semiconductor solutions will consist of the SiC967 microBRICK® synchronous buck regulator with integrated power MOSFETs and inductor and a wide input voltage range of 4.5 V to 60 V; scalable microBUCK® voltage regulators that deliver high efficiency; 400 V, 600 V, and 1200 V standard rectifiers in SlimDPAK 2L and SMPD 2L packages with high creepage distance; 650 V and 1200 V SiC Schottky diodes up to 12 A in eSMP® series and power packages for AC/DC power factor correction (PFC) and ultra high frequency output rectification; transient voltage suppressors (TVS); and analog switches in all major configuration types.

APEC 2025 will be taking place March 16-20 at the Georgia World Congress Center in Atlanta, Georgia. As the premier event in applied power electronics, APEC focuses on the practical and applied aspects of the power electronics business. More information on the conference and exposition is available at http://www.apec-conf.org/.

Vishay manufactures one of the world's largest portfolios of discrete semiconductors and passive electronic components that are essential to innovative designs in the automotive, industrial, computing, consumer, telecommunications, military, aerospace, and medical markets. Serving customers worldwide, Vishay is **The DNA of tech.®** Vishay Intertechnology, Inc. is a Fortune 1000 Company listed on the NYSE (VSH). More on Vishay at www.Vishay.com.

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