Vishay Intertechnology Automotive Grade MKP1848e DC-Link Film Capacitor Delivers High Temp. Operation Up to +125 °C and High Robustness Under High Humidity

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Designed for Automotive, Energy, and Industrial Applications, AEC-Q200 Qualified Device Withstands Grade III THB Testing

MALVERN, Pa., Sept. 03, 2025 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today introduced a new AEC-Q200 qualified DC-Link metallized polypropylene film capacitor designed for the harsh conditions of automotive, energy, and industrial applications. Offering high temperature operation up to +125 °C, the Vishay Roederstein MKP1848e delivers ripple current up to 44.5 A and withstands temperature humidity bias (THB) in accordance with Grade III of IEC60384-16 ed.3 – 60 °C / 93 % R.H for 1344 hours at rated voltage.

With its high temperature operation and resistance to high humidity, the Automotive Grade capacitor released today is ideal for automotive power conversion applications such as on-board chargers (OBC), power trains, HVAC systems, e-compressors, and DC/DC converters. This next-generation DC-Link capacitor also addresses the stringent needs for energy and industrial power conversion applications such as fast chargers, solar inverters, rectifiers for hydrogen electrolyzers, battery storage systems, motor drives, and UPS.

The MKP1848e offers rated capacitance from 1 µF to 140 µF and low ESR down to 1.0 mΩ, in rated voltages from 500 V_{DC} to 1300 V_{DC}. The devices provide 25 % higher ripple current density than previous-generation solutions with the same volume, while its compact footprint and pitch options down to 22.5 mm enable volume reductions up to 40 % and 15 %, respectively, at 500 V_{DC} and 900 V_{DC}.

To meet the standard high voltage levels of electric (EV) and plug-in hybrid electric vehicles (PHEV), the MKP1848e withstands operating voltages from 250 V_{DC} to 800 V_{DC} at +125 °C for a limited time. It also features high thermal shock capabilities — withstanding 1000 temperature cycles from -40 °C to +125 °C, with a 30-minute dwell time for each temperature extreme. The capacitor is available with customized terminals on request.

Samples and production quantities of the MKP1848e are available now, with lead times of 10 weeks.

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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Link to product photo:
https://www.flickr.com/photos/vishay/albums/72177720328396438

Link to datasheet:
http://www.vishay.com/ppg?26085 (MKP1848e DC-Link)

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