



## Vishay Intertechnology 150 V MOSFET Increases Efficiency With the Industry's Lowest RDS(ON) of 5.6 mΩ and RDS(ON)\*Qg FOM of 336 mΩ\*nC

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**Offered in PowerPAK® SO-8S Package, TrenchFET® Device's Low R<sub>thJC</sub> of 0.45 °C/W Enables High ID to 144 A to Increase Power Density**

MALVERN, Pa., Nov. 20, 2024 (GLOBE NEWSWIRE) -- To provide higher efficiency and power density for telecom, industrial, and computing applications, Vishay Intertechnology, Inc. (NYSE: VSH) today introduced a new 150 V TrenchFET® Gen V n-channel power MOSFET in the PowerPAK® SO-8S (QFN 6x5) package. Compared to previous-generation devices in the PowerPAK SO-8, the Vishay Siliconix [SiRS5700DP](#) slashes overall on-resistance by 68.3% and on-resistance times gate charge — a key figure of merit (FOM) for MOSFETs used in power conversion applications — by 15.4% while providing 62.5% lower R<sub>thJC</sub> and 179 % higher continuous drain current.

With the industry's lowest on-resistance of 5.6 mΩ at 10 V and on-resistance times gate charge FOM of 336 mΩ\*nC, the device released today minimizes power losses from conduction. This allows designers to boost efficiency to meet next-generation power supply requirements, such as 6 kW AI server power systems. In addition, the extremely low 0.45 °C/W R<sub>thJC</sub> of the PowerPAK SO-8S package enables continuous drain current up to 144 A to increase power density while providing robust SOA capability.

The SiRS5700DP is ideal for synchronous rectification, DC/DC converters, hot swap switching, and OR-ing functionality. Typical applications will include servers, edge computing, super computers, and data storage; telecom power supplies; solar inverters; motor drives and power tools; and battery management systems. RoHS-compliant and halogen-free, the MOSFET is 100 % Rg and UIS tested and complies with IPC-9701 criteria for more reliable temperature cycling. The device's standard 6 mm by 5 mm footprint is fully compatible with the PowerPAK SO-8 package.

Samples and production quantities of the SiRS5700DP are available now. For lead time information, please contact your local sales office.

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](http://www.Vishay.com).

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**Vishay Twitter feed:** <http://twitter.com/vishayindust>

**Links to product datasheet:**

<http://www.vishay.com/ppg?62299> (SiRS5700DP)

**Link to product photo:**

<https://www.flickr.com/photos/vishay/albums/72177720322008776>

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