

ISSUE: [October 2020](#)

### **200-V MOSFET Delivers 61-m $\Omega$ On-Resistance In 3-mm x 3-mm Package**

[Vishay Intertechnology's](#) Vishay Siliconix SiSS94DN is a 200-V n-channel MOSFET that offers industry-low typical on-resistance of 61 m $\Omega$  at 10 V in the 3.3-mm by 3.3-mm thermally enhanced PowerPAK 1212-8S package, in addition to an improved on-resistance-times-gate charge figure of merit (FOM) of 854 m $\Omega$ \*nC. The SiSS94DN is 65% smaller than devices with similar on-resistance in 6-mm by 5-mm packages (see the figure).

According to the company, the typical on-resistance of the SiSS94DN TrenchFET Gen IV power MOSFET is 20% lower than the next best product on the market in a similar package size, and its FOM is 17% lower than the previous-generation solution. These improvements result in reduced conduction and switching losses.

The SiSS94DN is well suited for primary-side switching for isolated dc-dc topologies and synchronous rectification in telecom equipment, computer peripherals, and consumer electronics; LED backlighting for notebooks, LED TVs, vehicles, and vessels; and motor drive control, load switching, and power conversion for GPS, factory automation, and industrial applications. The device is 100% RG- and UIS-tested, RoHS-compliant, and halogen-free.

Samples and production quantities of the SiSS94DN are available now. Pricing is \$0.30 per piece in 10,000-piece quantities. For more information see the SiSS94DN product [page](#).

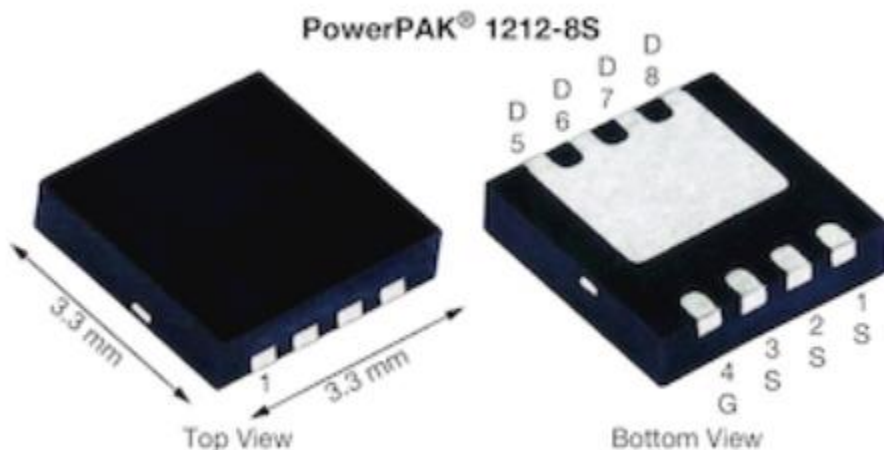


Figure. The SiSS94DN 200-V n-channel TrenchFET MOSFET offers a typical  $R_{DS(ON)}$  of 61 m $\Omega$  and an FOM of 854 m $\Omega$ \*nC in a 10.89-mm<sup>2</sup> package.