

Taiwan Semiconductor's ThinDPAK Schottkys Deliver Power Density Upgrades

AEC-Q Schottky rectifiers in lighter "thin" package with same footprint as standard DPAKs offer drop-in improvements in power density and thermal performance

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[EINPresswire.com/](https://www.einpresswire.com/) -- [Taiwan](#)

[Semiconductor](#), a global supplier of discrete power electronics devices, LED drivers, analog ICs and ESD protection devices, announces its new [ThinDPAK®](#) family of ultra-fast-recovery Schottky

rectifiers. ThinDPAK devices have the same footprint as standard DPAKs – but come in a thinner (1.33mm) package and offer superior power density and thermal performance. Fully AEC-Q qualified with a maximum operating temperature (T_j, max) of 175°C and typical reverse-recovery time of 25ns, ThinDPAKs assure reliability in automotive power electronics, high-frequency

inverters, steering diodes in HV applications, DC/DC converters, as freewheeling diodes, reverse battery protection, lighting and many other applications.

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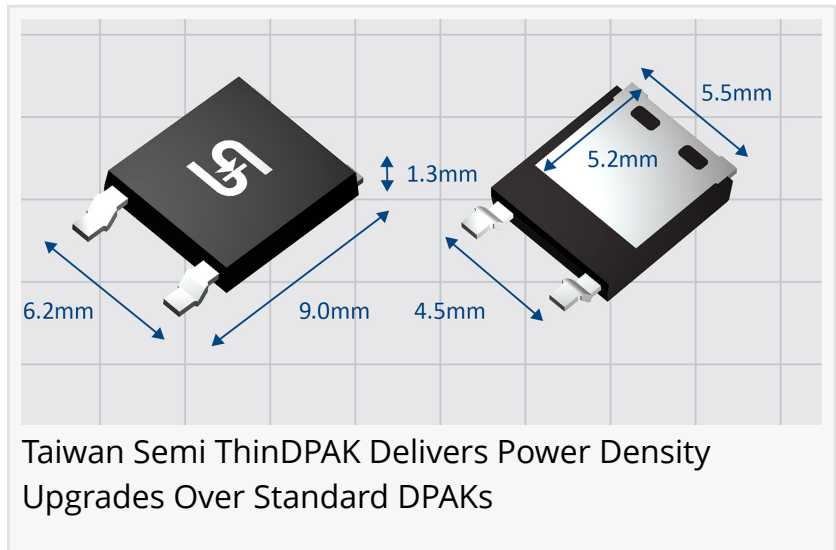
Our new ThinDPAKs are an excellent choice for optimizing new designs – and also for upgrading the performance of existing designs.”

Sam Wang, vice president, TSC Products.

The planar Schottky topology of advanced ThinDPAK devices provides industry-leading rectification efficiency that dissipates less heat than alternatives. For the heat that is dissipated, the new ThinDPAK devices' thermal resistance ($R_{j\text{A}}$) is 21.9% lower. Moreover, the devices save both weight and headroom compared to standard DPAKs.

“Our new ThinDPAKs are an excellent choice for optimizing new designs – and also for upgrading the performance of existing designs,” said Sam Wang, vice president, TSC Products. “Although ThinDPAKs are thinner, their footprint is identical to standard DPAKs, allowing simple drop-in replacement and easy trial.”

The ThinDPAK series comprises a selection of 34 devices with reverse voltage (VRRM) ratings



from 45Vdc to 200Vdc with current ratings up to 150A. Devices are available in single and dual (common cathode) configurations.

Design resources include comprehensive datasheets and spice models for each component in the series.

Price (Production Quantities): From \$0.31 (depending on device and quantity)

Lead Time: Samples: In-stock

Production Quantities: 12 weeks (ARO)

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