

### ***Rectifiers With Wettable Flank Contacts Offer 8-A And 1-kV Ratings***

[Taiwan Semiconductor's](#) TUAS8x series surface-mount standard recovery rectifiers are available with voltage ratings from 200 V to 1000 V. The rectifiers' wetttable flank package enables higher power density, increased manufacturing yields and reliability in a wide range of power conversion applications. According to the vendor, these devices offer an industry-leading 8-A maximum current (see the figure).

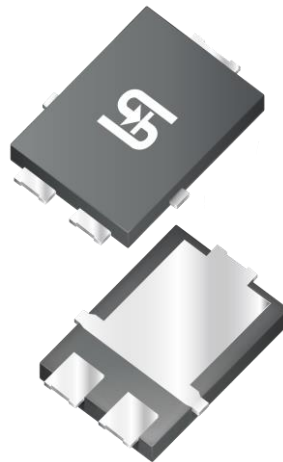
The industry-standard, SMPC4.6U SMD package configured with two anode and one cathode, wetttable flank terminations, facilitates automated placement and automated optical inspection (AOI). This package also offers advantages of smaller footprint and height, improved power dissipation and higher resistance to thermal shock.

The TUAS8x series devices are said to be the only ones available in this space saving, high performance package that offer the combination of high voltage performance (up to 1 kV) at current levels above 5 A. Spice models are available online for ease of design.

"Wetttable flank packages facilitate lower cost manufacturing (AOI vs X-Ray inspection) and offer higher production yield," reported Sam Wang, vice president, TSC Products. "These devices offer designers higher power density, improve manufacturability and reliability via resistance to thermal shock and dissipate heat into the PCB faster than alternative package configurations."

Applications include silicon, GaN and SiC-based power conversion circuits in commercial, industrial, telecom-datacom power systems, freewheeling diodes and anywhere general-purpose rectification is needed. For more information and links to complete product specifications and SPICE models, see the [website](#).

Available now in sample quantities from Digi-Key and Mouser, these devices are priced at \$0.35 in production quantities



*Figure. Wetttable flank packages provide several production and performance advantages. The TUAS8x series standard recovery rectifiers are said to be the only ones in wetttable flank packaging that offer the combination of high-voltage performance (up to 1 kV) at current levels above 5 A. These rectifiers offer an 8-A rating.*