

### **SMD Bridge Rectifiers Save Assembly Costs, Increase Power Density**

[Taiwan Semiconductor's](#) TBS series SMD bridge rectifiers (TBS406, TBS408, TBS410, TBS606, TBS608, TBS610) are designed to optimize higher power applications and prevent arcing problems through increased creepage distance with a wider pin distance (3.6 mm) between L and N. Designers benefit from a compact and thin profile package design with a profile height lower than 2 mm (see the figure).

The TBS6 series has a surge current up to 150 A (8.3 ms half sine wave) and 400 A (1-ms half sine wave)—much higher than the surge current of the standard SMD bridge rectifiers on the market, according to the vendor. The product family saves manufacturing assembly costs in comparison with rectifiers in DIP packages and increases power density based on lower thermal resistance.

Well suited for automated placement, the TBS series is available with an  $I_F$  of 4 A and 6 A and  $V_{RRM}$  ranging from 600 V up to 1,000 V. All parts are UL certified (Recognized File # E-326854), RoHS compliant as well as halogen and antimony free. More information including product specs and datasheets are available on the TBS series product [page](#).



*Figure. TBS series SMD bridge rectifiers optimize higher power applications and prevent arcing problems through increased creepage distance with a wider pin distance (3.6 mm) between L and N. These rectifiers have a surge current up to 150 A (8.3 ms half sine wave) and 400 A (1-ms half sine wave)—much higher than the surge current of the standard SMD bridge rectifiers on the market, according to the vendor. The product family saves manufacturing assembly costs in comparison with rectifiers in DIP packages and increases power density based on lower thermal resistance.*