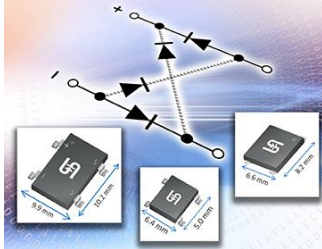


Taiwan Semi 1000V Bridge Rectifiers Facilitate Compliance and Manufacturability

Advanced series designed for off-line power conversion applications; 2A/3A/4A-rated versions improve EMC performance and reduce component count; UL-certified components also comply with global materials standards; surface mount devices facilitate automated placement



Brea, CA. — September 29, 2020 — [Taiwan Semiconductor](#), a global supplier of discrete power electronics devices, LED drivers, analog ICs and ESD protection devices, announces the availability of the RxBS Family of glass passivated 1000V bridge rectifiers. Offered with current ratings of 2A, 3A and 4A, these miniature surface-mount devices simplify compliance with global EMC requirements while lowering component count. The devices' UL recognition can also aid in attaining safety certification for the end product.

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The [RxBS Series](#) provides a number of beneficial features:

- **Optimized Reverse Recovery Time** – Tightly controlled T_{rr} (300ns, max) reduces conducted emissions, making it easier to meet global EMC requirements, and eases the complexity and lowers the cost of filtering components.
- **Lowest Forward Voltage Drop** – Industry-leading maximum V_f (1.30V @ $T_j=25^\circ\text{C}$ / 1.16V @ $T_j=125^\circ\text{C}$) improves efficiency and thermal performance.
- **UL Certification** – Components are UL-recognized (#E-326854) components, unlike most devices in this class. Meeting UL at the component level eases safety certifications of the end product.
- **Global Materials Compliance** – RoHS compliant, halogen-free (per IEC-61249-2-21), WEEE, REACH, California Prop. 65 and others.
- **Small Surface Mount Package** – Saves manufacturing assembly costs, in comparison with DIP packages, and increases power density based on lower thermal resistance. Ideal for automated placement.

“Taiwan Semiconductor’s very first products were bridge rectifiers and our decades of experience is evident in this new series,” said Vice President, TSC Products, Sam Wang. “The combined improvements of EMC performance and efficiency, component size and attention to global safety and materials compliance set a new standard for this class of rectifiers.”

Applications for the RxBS Family include switch-mode power supplies, PoE Injectors, battery chargers, industrial equipment, TVs/monitors, off-line LED applications and garage door openers.

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

Lead Time: Samples: in-stock @ Digikey; Production quantities: 8 weeks, ARO

About Taiwan Semiconductor (TSC).

Recognized for more than 40 years for its core competence in discrete power rectifiers, Taiwan Semiconductor’s expanded product portfolio provides a complete solution from one source: including trench Schottky’s, MOSFETs, power transistors, LED driver ICs, analog ICs and ESD protection devices. A global enterprise with 2,000 over employees, TSC’s production facilities in China and Taiwan are fully compliant with current automotive and environmental standards such as IATF16949, ISO9001 and ISO14001. Taiwan Semiconductor products are used in a vast array of applications in the electronics industry including automotive, computer, consumer, industrial, telecom and photovoltaic. Through strategic expansion of innovative manufacturing capabilities and its focus on pioneering efficient semiconductor solutions, TSC is the right choice for a successful and lasting business relationship.

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