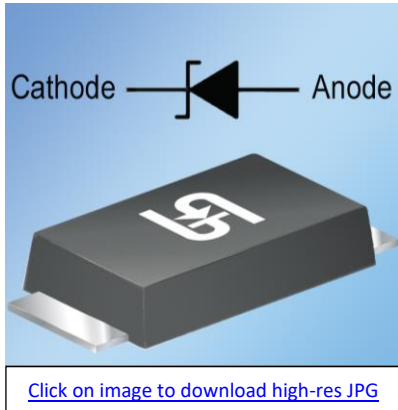


## Taiwan Semiconductor Introduces a New Series of Ultra-Low Bias Current / High-Efficiency Zener Diodes

*1.8 – 39V, 50µA bias current, 500 mW max power dissipation Zeners ideal for IoT and IIoT applications; industry-standard, SOD-123 surface-mount package facilitates drop-in upgrade*



Brea, CA — May 15, 2024 — [Taiwan Semiconductor](#) – a global supplier of discrete power electronics devices, LED drivers, analog ICs and ESD protection devices – announces its new series of [Zener diodes](#) with a selection of devices providing regulated voltages from 1.8VDC to 39VDC, all with ultra-low bias current ( $I_{ZT}$ ) of 50µA and maximum power dissipation ( $P_D$ ) of 500mW. These devices are ideal for applications where exceptionally low bias current is needed (to extend battery life), essential (for energy harvesting), or desirable (in lighting and IIoT) – while still providing uncompromised Zener regulation.

The 39 individual Zener diodes in the series with part numbers ranging from MMSZ4668 to MMSZ41716 are all packaged in an industry-standard, low-profile, SOD-123 surface-mount package. With their low  $I_{ZT}$ , these devices are a straightforward upgrade to existing designs (without the need for PCB modifications), as well as for new designs.

“Current trends in IoT and in IIoT where large amounts of bias current are not available are requiring upgrades or entirely new designs to enable the applications,” said Sam Wang, vice president, TSC Products. “Our new line of Zener diodes featuring an ultra-low 50µA  $I_{ZT}$  provide the perfect solution.”

Click [here](#) for more information and links to complete product specifications. Design resources include comprehensive datasheets and spice models for each component in the series.

**Budgetary Price:**

**From \$0.02** (depending on device and quantity)

**Lead Time:**

**Samples: In-stock**

**Production Quantities: 16 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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