



## **Toshiba launches a range of 15 new Zener diodes for protection of power lines**

New devices use a planar structure to help improve equipment reliability

**Düsseldorf, Germany, 4th November 2025** – Toshiba Electronics Europe GmbH (“Toshiba”) has expanded their range of Zener diodes with the launch of a further 15 products. These devices will be used to protect the power lines of semiconductor devices and equipment from switching surges and long duration overvoltage pulses. They will be useful in a wide range of applications, including consumer and industrial.

The new CMZBxxA series products feature a planar structure and are designed as successors to the mesa-structured CMZBxx series products, which have been announced as reaching end of life (EOL).

The innovative planar structure enables a low reverse current and high reliability as the PN junction is protected with oxide film. Additionally, fine process adjustments ensure a reduced variation in the Zener voltage between devices.

The new products feature protection against transient overvoltage pulses, and also against long duration overvoltage pulses, which are usually difficult for ESD protection diodes to handle. In power lines of equipment, switching surges with long pulse widths of up to milliseconds may be generated when the circuit switches. The new Zener diodes can protect semiconductor devices from switching surges and overvoltage pulses close to DC.

Compared to the CMZBxx series, the new products improve the specification range of Zener voltage from  $\pm 10\%$  (typ.) to  $\pm 5\%$  (typ.) and the maximum reverse current ( $I_R$ ) from  $10\mu\text{A}$  to  $0.5\mu\text{A}$ . These improvements help to simplify equipment design and reduce overall power consumption. Additionally, as the new CMZBxxA devices use the same M-

FLAT (2.4mm x 4.7mm x 0.98mm) package as the existing CMZBxx series, upgrading does not require any PCB layout changes.

The 15 products in the lineup cover a range of Zener voltage ( $V_z$ ) from 12V (typ.) to 51V (typ.), supporting a wide range of commonly used voltages.

The new products help to improve equipment reliability by providing surge protection for power supply lines.

Find out more about the new Zener diodes on Toshiba's website [here](#)

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#### **About Toshiba Electronics Europe**

[Toshiba Electronics Europe GmbH](#) (TEE) offers European consumers and businesses a wide variety of hard disk drive (HDD) products plus semiconductor solutions for automotive, industrial, IoT, motion control, telecoms, networking, consumer and white goods applications. Next to HDDs, the company's broad portfolio encompasses power semiconductors and other discrete devices ranging from diodes to logic ICs, optical semiconductors as well as microcontrollers and application specific standard products (ASSPs) amongst others. In addition, TEE offers SCiB™ battery cells and modules with lithium titanium oxide (LTO) for heavy-duty applications.

TEE has its headquarters in Düsseldorf, Germany, with branch offices in France, Italy, Spain, Sweden and the United Kingdom providing marketing, sales and logistics services.

Visit Toshiba's websites at [www.toshiba.semicon-storage.com](http://www.toshiba.semicon-storage.com) and [www.scib.jp/en](http://www.scib.jp/en) for further company and product information.

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**November 2025 Ref. 7645(A)E**