



Ultra-Compact Bi-Directional ESD Protection Diode for Portable Devices

Diode combines up to 30kV protection with small footprint

Düsseldorf, Germany, 18 January 2018 – Toshiba Electronics Europe has introduced a new bi-directional electrostatic discharge (ESD) protection diode DF2B7ASL which is mainly targeting interface protection in applications with minimum footprint requirement such as portable equipment.

As the DF2B7ASL features a snapback characteristic, it can provide low clamping voltages, which together with the low dynamic resistance of the diode ensures superior protective performance to safeguard semiconductor ICs against static electricity. Housed in ultra-compact packaging, the device is designed for applications requiring small footprints – including interfaces in smart phones, wearables and other battery powered equipment.

While featuring low dynamic resistance of just 0.2Ω and a low clamping voltage (V_C) of 11V at 5V signal lines ($V_{RWM} \leq 5.5V$), the DF2B7ASL still offers an electrostatic discharge voltage rating of +/-30kV in accordance with IEC61000-4-2 (contact discharge).

Taking the need for small footprints into consideration, the new Toshiba diodes are supplied in a SOD-962 (SL2) package with a board mounting footprint of only 0.32mm x 0.62mm.

###

About Toshiba Electronics Europe

[Toshiba Electronics Europe GmbH](#) (TEE) is the European electronic components business of [Toshiba Electronic Devices and Storage Corporation](#). TEE offers European consumers and businesses a wide variety of innovative hard disk drive (HDD) products plus semiconductor solutions for automotive, industrial, IoT, motion control, telecoms, networking, consumer and white goods applications. The company's broad portfolio encompasses integrated wireless ICs, power semiconductors, microcontrollers, optical semiconductors, ASICs, ASSPs and discrete devices ranging from diodes to logic ICs.

Formed in 1973 in Neuss, Germany, TEE has headquarters in Düsseldorf, Germany, with branch offices in Germany, France, Italy, Spain, Sweden and the United Kingdom providing design, manufacturing, marketing and sales. Company president is Mr. Akira Morinaga.

For more company information visit TEE's web site at www.toshiba.semicon-storage.com.

Contact details for publication:

Toshiba Electronics Europe GmbH, Hansaallee 181, D-40549 Düsseldorf, Germany

Tel: +49 (0) 211 5296 0 Fax: +49 (0) 211 5296 79197

Web: www.toshiba.semicon-storage.com/eu/company/news.html

E-mail: discrete-ic@toshiba-components.com

Contact details for editorial enquiries:

Michelle Shrimpton, Toshiba Electronics Europe GmbH

Tel: +44 (0)193 282 2832

E-mail: MShrimpton@teu.toshiba.de

Issued by:

Birgit Schöniger, Publitek

Tel: +44 (0) 20 8429 6554

Web: www.publitek.com

E-mail: birgit.schoeniger@publitek.com

January 2018 Ref. 6986/A