



Toshiba expands super junction N-Channel MOSFET series with addition of new 650V devices

Enhanced FoM capabilities help to significantly boost power supply efficiency levels

Düsseldorf, Germany, 24th June 2020 – Toshiba Electronics Europe GmbH ("Toshiba") has introduced eight new super junction N-channel power MOSFETs to strengthen its latest DTMOSVI series - which has already gained a lot of market traction thanks to an excellent ratio of on-resistance and support for elevated switching speeds.

The 650V-rated TK110N65Z, TK110Z65Z, TK110A65Z, TK125V65Z, TK155A65Z, TK170V65Z, TK190A65Z and TK210V65Z devices all possess highly appealing performance parameters. These MOSFETs present engineers with a 40% reduction in terms of their drain-source on-resistance x gate-drain charge (QGD) figure of merit (FoM) when compared to the previous DTMOS generation. As a consequence, they can raise the efficiency of switch-mode power supplies by approximately 0.36 % - thereby enabling a substantial decrease in switching losses, compared to the previous generation.

The new MOSFETs are targeted at use in the switch-mode power supplies of a broad range of industrial equipment (including data center infrastructure, back-up power sources and the power conditioners of photovoltaic generators). They will allow major performance upgrades when replacing existing devices. The TK110Z65Z, TK125V65Z, TK170V65Z and TK210V65Z offer a Kelvin source pin for improved control and efficiency increase potential. The TK110N65Z and TK110Z65Z fit into TO-247 packages with 3/4 pin's, while the TK110A65Z, TK155A65Z and TK190A65Z come in fully isolated TO-220SIS packages. Finally, the TK125V65Z, TK170V65Z and TK210V65Z are all housed in an 8mm x 8mm DFN package format for surface mounting. This means DTMOSVI solutions can now be sourced whatever the specific board real estate requirements are.

Follow the link below for more information on Toshiba's super junction N-Channel MOSFETs:

<https://toshiba.semicon-storage.com/eu/semiconductor/product/mosfets/400v-900v-mosfets.html>

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About Toshiba Electronics Europe

[Toshiba Electronics Europe GmbH](#) (TEE) is the European electronic components business of [Toshiba Electronic Devices and Storage Corporation](#) (Toshiba). 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, ASSPs and discrete devices ranging from diodes to logic ICs.

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

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

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