



## **Toshiba launches low-spike-type 40V, N-channel power MOSFET**

*New MOSFET reduces EMI in switching power supply application*

**Düsseldorf, Germany, 5 August 2021** – Toshiba Electronics Europe GmbH (“Toshiba”) has launched the TPHR7404PU, a 40V, N-channel MOSFET that uses the latest generation U-MOSIX-H process. The MOSFET’s low-spike capability reduces overshoot in switching applications. This makes it ideal for secondary synchronous rectification in switching power supply applications thanks to its contribution to reduced EMI. This is achieved while maintaining an extremely low on-resistance of just 0.74mΩ (max) at a  $V_{GS}$  of 10V. A gate threshold voltage of 2V to 3V ( $I_d = 1\text{mA}$ ) will help to avoid unintended turn on, for example, in battery-powered tools.

The TPHR7404PU features a new cell structure, using a parasitic snubber, thereby limiting noise and ringing during switching. This results in a lower peak voltage when switching, and reduced signal ringing. Applications such as high-efficiency DC-DC converters, motor drivers, and switching voltage regulators will all benefit from the low-spike capability.

Available in a 5 x 6mm SOP Advance package, its small size and extraordinary low 0.71°C/W channel-to-case thermal resistance make it suitable for efficiency-focused, compact power solutions.

For further information, please visit:

<https://toshiba.semicon-storage.com/eu/semiconductor/product/mosfets/12v-300v-mosfets/detail.TPHR7404PU.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](#). 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. 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.

TEE has headquarters in Düsseldorf, Germany, with branch offices in France, Italy, Spain, Sweden and the United Kingdom providing marketing, sales and logistics services. The company president is Mr. Tomoaki Kumagai.

For more company information visit TEE's web site at [www.toshiba.semicon-storage.com](http://www.toshiba.semicon-storage.com).

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