



Toshiba Announces Compact Low ON-Resistance N-Channel MOSFETs for automotive

Automotive-qualified devices curb power consumption to boost vehicle fuel economy

Düsseldorf, Germany, 18th August 2020 – Toshiba Electronics Europe GmbH ("Toshiba") has developed a series of new high-efficiency N-channel MOSFETs for automotive applications that are based on the company's advanced U-MOSVIII-H process technology. The XPN3R804NC and XPN7R104NC both have 40V voltage ratings, while the XPN6R706NC and XPN12006NC support 60V operation. They all exhibit extremely low ON-resistance values, reaching down to 3.8mΩ (for the XPN3R804NC at 10V), plus minimal leakage current.

These MOSFETs are housed in surface-mount TSON Advance (WF) packages which ensure that board utilization is kept to a minimum. They have a 3.3mm × 3.6mm (typical) footprint and can replace devices with a size of 5mm × 6 mm. Through inclusion of wettable flank terminals, board mounting procedures and automated optical inspection (AOI) activities are also aided.

Fully AEC-Q101-compliant, these MOSFET devices are intended for deployment within automotive environments. Thanks to their inherent compactness, they can contribute significantly to a shrinkage in the size of vehicles' electronic control units (ECUs). Other potential application scenarios where they may be utilized include switching regulators, DC-DC converters and motor drivers.

Further information for these products can be found under the following links:

<https://toshiba.semicon-storage.com/eu/semiconductor/product/mosfets/12v-300v-mosfets/detail.XPN3R804NC.html>

<https://toshiba.semicon-storage.com/eu/semiconductor/product/mosfets/12v-300v-mosfets/detail.XPN7R104NC.html>

<https://toshiba.semicon-storage.com/eu/semiconductor/product/mosfets/12v-300v-mosfets/detail.XPN6R706NC.html>

<https://toshiba.semicon-storage.com/eu/semiconductor/product/mosfets/12v-300v-mosfets/detail.XPN12006NC.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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August 2020

Ref. 7283A_EN