



Toshiba announces compact intelligent power device with 600V rating

Efficient operation reduces power consumption of motor equipment

Düsseldorf, Germany, 28th May 2020 – Toshiba Electronics Europe (“Toshiba”) has announced a high voltage intelligent power device intended for driving the motor within equipment such as air conditioners, air cleaners and pumps. With its rated power supply voltage (V_{BB}) of 600V, the TPD4162F can be used for any applications with input signals in the range 200 to 220VAC.

The new IC contains a PWM circuit, 3-phase decoder, level shifting high-side driver and low side driver with embedded IGBTs and FRDs. This allows direct drive of brushless DC (BLDC) motors with square wave input signals from a Hall sensor or Hall IC without the requirement for a PWM controller IC.

Based upon a new process, the TPD4162F offers reduced power dissipation of approximately 10% compared its predecessor (TPD4152F), reducing the power dissipation of motor drivers.

Multiple protection features including current limit, over current protection (OCP), thermal shutdown and undervoltage lockout (UVLO) are built in thereby reducing the need for peripheral circuits. This, along with the small HSSOP31 surface mount package with a 17.5 x 11.9mm footprint and 2.2mm height, allows for compact designs including the ability to mount the driver circuitry directly to the motor.

Mass production has started and the first shipments will be made today

Follow the link below for more information on Toshiba's intelligent power IC line-up.
<https://toshiba.semicon-storage.com/eu/semiconductor/product/intelligent-power-ics/detail.TPD4162F.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. 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.

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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