



Toshiba launches new family of low voltage driven photorelays

Tiny packages enable high-density test equipment applications

Düsseldorf, Germany, 11th June 2019– Toshiba Electronics Europe GmbH, the industry leader in the miniaturisation of cutting-edge photorelays, today introduced a new family of five photorelays housed in one of the industry's smallest package. The new devices are suited for use in automatic test equipment, memory testers, SoC/LSI testers and probe cards.

Both TLP34xxSRL devices and all three of the TLP34xxSRH series have input voltage driven characteristics. The TLP3406SRL and TLP3407SRL support a DC voltage range of 1.8V (typ.) to 3.3V (typ.), while TLP3406SRH, TLP3407SRH and TLP3412SRH support a DC voltage range of 3.3V (typ.) to 5V (typ.), characteristics that enhance compatibility with today's low voltage FPGAs.

The new photorelays are housed in tiny S-VSON4T (2.0mm x 1.45mm) packages and require a mounting space of just 2.9mm², a footprint approximately 27% smaller than Toshiba's previous generation VSONR4 (2.75mm x 1.45mm) package. In addition, all devices have a built-in input resistor, saving space by eliminating the need for an external resistor. The tiny packaging will allow engineers to design smaller test boards, especially

probe cards. It also allows the number of photorelays on a board to be increased to achieve higher density solutions.

Despite their tiny package size, the new photorelays can drive large currents. The TLP3406SRx delivers up to 1.5A with an off-state voltage (V_{OFF}) of 30V and an on-state resistance (R_{on}) of 0.2 Ω (max.) while the TLP3407SRx is capable of up to 1A with a V_{OFF} of 60V and R_{on} of 0.3 Ω . The TLP34012SRH can drive up to 0.4A ($V_{OFF} = 60V / R_{on} = 1.5\Omega$). This makes all the new devices highly suited to device power supply applications across a wide range of test equipment. All devices are guaranteed to work at operating temperatures up to 110°C and provide 500V_{rms} of isolation.

Shipments of the new devices will begin immediately.

Follow the link below for more on Toshiba's optical devices line-up:

<https://tinyurl.com/ToshibaPhotorelays>

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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, 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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June 2019

Ref. 7204/A