



Vishay Intertechnology Upgrades TSOP18xx, TSOP58xx, and TSSP5xx Series IR Receiver Modules With New In-House IC

January 18, 2024

Devices Offer Drop-in Replacements for Existing Solutions With Lower Current Consumption, Wider Voltage Range, and Improved ESD Robustness, Dark-Ambient Sensitivity, and Performance Under Strong DC Light

MALVERN, Pa., Jan. 18, 2024 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today announced that it has upgraded its [TSOP18xx](#), [TSOP58xx](#), and [TSSP5xx](#) series of infrared (IR) receiver modules for remote control, proximity sensing, and light barrier applications. Offered in Minicast packages, the enhanced solutions provide drop-in, plug and play replacements for existing devices in the series while offering 50 % lower current consumption, improved ESD robustness to 12 kV, a wider supply voltage range from 2.0 V to 5.5 V, 20 % higher dark-ambient sensitivity, and improved performance under strong DC light.

Devices in the Vishay Semiconductors TSOP18xx, TSOP58xx, and TSSP5xx series each consist of a photodetector, preamplifier circuit, and IR filter in a single package. With their reduced current consumption over a wider voltage range, the receiver modules increase battery life in mobile devices, while their robustness under bright sunlight enables outdoor applications. By upgrading the IR receivers with Vishay's latest in-house IC technology, the company is ensuring the long-term availability of the products — with reduced lead times — for its customers. And as drop-in replacements for existing devices, the modules help save costs by eliminating the need for PCB redesigns.

The TSOP18xx and TSOP58xx series are designed for IR remote control in televisions, soundbars, video game systems, set-top boxes (STBs), appliances, air conditioners, and more. For the remote control function in these products, the devices provide increased robustness against disturbances such as IR emissions from different kinds of lamps. In addition, the modules are insensitive to supply voltage variations and ripple noise. The devices are available with carrier frequencies from 30 kHz to 56 kHz and in six automatic gain control (AGC) versions for short and long burst codes.

TSSP5xx series fixed-gain IR receiver modules deliver long range proximity and presence sensing to 2 m and can be paired with the TSAL6200 emitter for light barrier applications to 8 m (TSSP580xx). Sensitive to a carrier frequency of 38 kHz — and offering a peak sensitivity of 940 nm — the devices are ideal for sensing the distance to objects for toys, drones, and robots; object approach detection for the activation of displays and user consoles; and garage door light barriers. They may also be used as reflective sensors for hand dryers, towel or soap dispensers, water faucets, toilets, vending machine fall detection, and security and pet gates.

Samples and production quantities of the upgraded IR receiver modules are available now, with lead times of four weeks.

Vishay manufactures one of the world's largest portfolios of discrete semiconductors and passive electronic components that are essential to innovative designs in the automotive, industrial, computing, consumer, telecommunications, military, aerospace, and medical markets. Serving customers worldwide, Vishay is **The DNA of tech**.[®] Vishay Intertechnology, Inc. is a Fortune 1,000 Company listed on the NYSE (VSH). More on Vishay at www.Vishay.com.

The DNA of tech[®] is a registered trademark of Vishay Intertechnology.

Links to product datasheets:

<http://www.vishay.com/ppg?82802> (TSOP181..., TSOP183..., TSOP185...)
<http://www.vishay.com/ppg?82739> (TSOP182..., TSOP184..., TSOP186...)
<http://www.vishay.com/ppg?82462> (TSOP581..., TSOP583..., TSOP585...)
<http://www.vishay.com/ppg?82461> (TSOP582..., TSOP584...)
<http://www.vishay.com/ppg?82476> (TSSP58P38)
<http://www.vishay.com/ppg?82479> (TSSP580...)

Link to product photo:

<https://www.flickr.com/photos/vishay/albums/72177720314080231>

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Source: Vishay Intertechnology, Inc.