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## New TSOP39xxx and TSOP59xxx Series Native Top-View IR Receivers in Through-Hole Package Save Space in Consumer Products

***Featuring Two-Lens Design, Devices Offer Typical Irradiance Down to 0.08 mW/m<sup>2</sup> in Four AGC Versions***

### Product Benefits:

- Native top-view IR receivers
- Offered in through-hole package
- High sensitivity with typical irradiance down to 0.08 mW/m<sup>2</sup>
- Supply voltage from 2.5 V to 5.5 V
- Very low supply current down to 0.35 mA typical
- Improved immunity against ambient light
- Insensitive to supply voltage variations and ripple noise
- Offered in four automatic gain control (AGC) versions for short and long burst codes
- RoHS-compliant, halogen-free, and [Vishay Green](#)

Industry-First Native Top-View IR Receiver in a Through-Hole Package



### Market Applications:

- IR remote control applications in consumer products such as set-top boxes, air conditioners, and high-end audio systems

### The News:

Vishay Intertechnology broadens its optoelectronics portfolio with the introduction of two new series of miniature infrared (IR) receiver modules for IR remote control applications. To save space in consumer products, the Vishay Semiconductors TSOP39xxx and TSOP59xxx series devices are the industry's first native top-view IR receivers in a through-hole package.

- Space-saving alternative to side-view packages modified with a 90° lead bend
  - Eliminating lead bend reduces PCB space requirements
- Feature a two-lens design for high sensitivity
- Simplify designs with a photodetector, preamplifier circuit, and IR filter in a single 4-pin epoxy package



# New Product Info



**Product Group:** Vishay Semiconductors, Optoelectronics / **February 2017**

## The Key Specifications:

Series	TSOP39xxx	TSOP59xxx
Typical irradiance @ 0°(mW/m <sup>2</sup> )	0.08	0.12
Supply voltage (V)	2.5 to 5.5	
Typical supply current (mA)	0.35	0.7
Transmission range (m)	45	
Carrier frequencies (kHz)	30 to 56	

### Availability:

Samples and production quantities of the TSOP39xxx and TSOP59xxx series are available now, with lead times of four weeks.

To access the product datasheets on the Vishay Website, go to

<http://www.vishay.com/ppg?82734> (TSOP393.., TSOP395..)

<http://www.vishay.com/ppg?82776> (TSOP593.., TSOP595..)

<http://www.vishay.com/ppg?82778> (TSOP392.., TSOP394....)

For the latest in all things opto — articles, videos, and products — visit Vishay's Opto Squad blog site:  
[www.vishayopto.com](http://www.vishayopto.com).

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