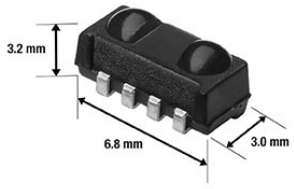
TSOP15300 IR Receiver Modules Support 30 kHz to 68 kHz for Universal Remote Codes, with 2.0 V to 5.5 V Operation and Up to 18 m Range

Product Benefits:

- Receives and demodulates all major remote control codes, enabling a single-component universal remote control solution
- Wide modulation frequency acceptance from 30 kHz to 68 kHz to replace receivers tuned to a single center frequency
- Reduces component counts to lower system cost and save board space
- Immunity against ripple noise and interference from common sources such as IR emissions in CFL lamps and LCD televisions, and RF emissions from onboard Wi-Fi antennas
- Reliable transmission distances up to 18 m when paired with a 50 mA IR emitter



- Integrates a photodetector, preamplifier circuit, and IR filter in one module to simplify designs
- Demodulated output signal can be directly connected to a microprocessor for decoding
- Wide supply voltage range from 2.0 V to 5.5 V, with a typical supply current of 0.35 mA
- RoHS-compliant, halogen-free, and Vishay Green

Market Applications:

- IR remote control receivers for consumer electronics such as televisions, audio systems, gaming consoles, soundbars, set-top boxes (STB), and video projectors

The News:

Vishay introduces a new series of infrared (IR) receiver modules for IR remote control applications. Featuring a wide modulation frequency from 30 kHz to 68 kHz, devices in the Vishay Semiconductors TSOP15300 series are designed to receive and demodulate all major remote control codes on the market, enabling a single-component universal remote control solution.

- Addresses the limitation of standard IR receivers tuned to one center frequency, reducing the need for multiple devices across different code sets
- Helps simplify universal remote control designs by saving space and reducing component counts
- Provides immunity against ripple noise and interference from IR emissions in CFL lamps and LCD televisions, and RF emissions from onboard Wi-Fi antennas
- When paired with a 50 mA emitter, supports reliable transmission distances up to 18 m
- Integrates a photodetector, preamplifier circuit, and IR filter within a 4-pin Heimdall package
- Demodulated output signal can be directly connected to a microprocessor for decoding
- Optimized for short burst codes; operates from 2.0 V to 5.5 V with typical supply current of 0.35 mA, and features a maximum irradiance of 0.2 mW/m^2 at 45 kHz

Availability:
Samples and production quantities of the TSOP15300 series are available now, with lead times of six weeks.

To access the product datasheet on the Vishay Website, go to
http://www.vishay.com/ppg?82917 (TSOP15300)

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