TSSP9xxx Series Sensor Modules in Five Compact Packages Offer Long Range Presence and Proximity Sensing Up to 2 m and 30 m for Light Curtain Applications, and Feature Fast 300 µs Reaction Time and High Interference Strength Without Spurious Signals

Product Benefits:
- Fast 300 µs reaction time
- Proximity sensing up to 2 m
- 30 m range for light curtain and perimeter guard applications
- Available in compact Minimold (TSSP930..), Mold (TSSP940..), Heimdall (TSSP950..), Panhead (TSSP960..), and Minicast (TSSP980..) packages
- Operate at a supply voltage range from 2.0 V to 3.6 V
- Feature a low supply current of 0.8 mA
- Offer carrier frequencies of 38 kHz and 56 kHz
- Insensitive to supply voltage and ripple noise
- Provide shielding against EMI
- An IR filter suppresses visible light
- RoHS-compliant, halogen-free, and Vishay Green

Market Applications:
- Proximity sensor for toys, drones, robots, and vicinity switches
- Reflective sensors for hand dryers, towel or soap dispensers, water faucets, and toilets
- Vending machine fall detection
- And security and pet gates

News:
Vishay Intertechnology introduces a new series of infrared (IR) sensor modules in five compact package types. Featuring a fast 300 µs reaction time, Vishay Semiconductors TSSP9xxx AGC 0 devices deliver long range presence and proximity sensing up to 2 m, and a range up to 30 m for light curtain and perimeter guard applications.
- Compared to previous-generation devices:
  - Provide higher interference strength without spurious signals
  - Offer output pulse width closer to the optical burst length
  - Almost constant detection threshold over their -25 °C to +85 °C temperature range
  - Detect a valid IR signal up to a higher DC illuminance level
- The TSSP9xxx AGC 0 devices are a good choice for fast proximity applications (~15 ms), by using a burst pattern with variable intensity
- Feature a PIN photodiode and sensor IC in compact packages to simplify designs
- Designed to receive IR pulses from an emitter with a peak wavelength of 940 nm
Key Specifications:
- Supply voltage: 2.0 V to 3.6 V
- Supply current: 0.8 mA
- Carries frequencies: 38 kHz and 56 kHz
- Peak wavelength: 940 nm
- Temperature range: -25 °C to +85 °C

Availability:
Samples and production quantities of the new sensors are available now, with lead times of four weeks.

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

To access the product datasheets on the Vishay Website, go to
http://www.vishay.com/ppg?82866 (TSSP930..)
http://www.vishay.com/ppg?82843 (TSSP940..)
http://www.vishay.com/ppg?82867 (TSSP950..)
http://www.vishay.com/ppg?82868 (TSSP960..)
http://www.vishay.com/ppg?82869 (TSSP980..)

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