New compact silicon avalanche photodiode series launched

This next-generation of Si APDs offers enhanced sensitivity in the UV to visible region for short wavelength applications.

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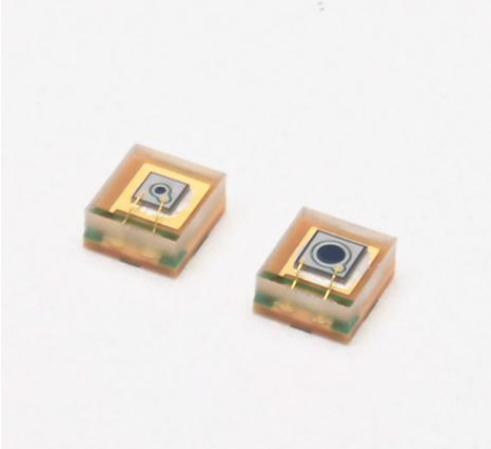

S17268 series silicon avalanche photodiode

Hamamatsu Photonics introduces the S17268 Series, a new silicon avalanche photodiode series (Si APD) designed for high-precision optical detection in the UV to VIS regions for industrial, research, and environmental applications. The compact device delivers superior sensitivity, enabling easy integration and reliable performance.

Key Benefits

The S17268 Si APD Series, with its enhanced UV to visible region, has a compact design offering high sensitivity to short wavelengths. Unlike traditional detectors, these new devices operate with minimal voltage, significantly reducing power consumption while maintaining high-speed performance and low noise levels. Their high quantum efficiency of 82 % at 450 nm also enables low-noise and low-bias operation. This combination makes the Si APD ideal for demanding applications requiring high fidelity and precision. Key benefits include:

- **Compact Design:** Space-efficient, surface-mount type package, allowing for easy integration into various setups.
- **High Short-Wavelength Sensitivity:** Optimized for detecting a wide range of short wavelengths, enhancing the versatility of the detector.
- **Low-Bias Operation:** Reduces power requirements without compromising performance.

- **Low Noise:** Ensures maximum signal noise ratio for precision in any application**.**
- **High Speed:** Capable of handling rapid detection needs without lag.

This new photodiode represents a significant advancement over previous models, reinforcing Hamamatsu's commitment to delivering solutions that meet evolving customer needs.

Target Applications

The S17268 Series helps address current market challenges in integrating reliable, precise sensors into space-constrained devices for :

- Optical rangefinding
- Industrial LiDAR
- Flow cytometry
- Particle counters

For full technical details, visit the S17268 Silicon Avalanche Photodiode product page and datasheet.