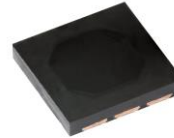




New K857PH Automotive Grade 4-Quadrant Silicon PIN Photodiode in Surface-Mount Package Delivers Peak Sensitivity of 950 nm; AEC-Q101 Qualified Device in Opaque Package Offers Excellent Signal to Noise Ratio and Virtually no Tolerance Between Segments

Product Benefits:

- Four monolithic PIN diodes integrated into a single 4.72 mm by 4.72 mm by 0.75 mm top-view, surface-mount package
- Active area of 1.6 mm² per quadrant
- AEC-Q101 qualified
- 0.1 % low electrical crosstalk
- Virtually no tolerance between segments
- Wide sensitivity range from 710 nm to 1100 nm
- 950 nm peak wavelength of sensitivity
- 11 μ A reverse light current
- $\pm 60^\circ$ angle of half sensitivity
- RoHS-compliant, halogen-free, and Vishay Green
- Floor life of 186 h in accordance with J-STD-020



Market Applications:

- Small signal detection for automotive rain / light sensors, industrial automation systems, laser beam alignment, and virtual reality applications

The News:

The Optoelectronics group of Vishay Intertechnology introduces a new Automotive Grade 4-quadrant silicon PIN photodiode in a standard surface-mount package. Enabling a variety of sensor and control applications for the automotive, consumer, and industrial markets, the Vishay Semiconductors K857PH combines high photo sensitivity with low 0.1 % crosstalk and virtually no tolerance between its segments.

- Opaque package sides eliminate stray light irradiating the photodiode, resulting in excellent signal to noise ratio
- Linear photo response enables small signal detection
- Built on homogenous technology

The Key Specifications:

- Package size: 4.72 mm by 4.72 mm by 0.75 mm
- Active area: 1.6 mm² per quadrant
- Sensitivity range: 710 nm to 1100 nm
- Reverse voltage: 10 V
- Reverse light current: 11 μ A per segment at $E_e = 1 \text{ mW/cm}^2$ and a 940 nm wavelength
- Angle of half sensitivity: $\pm 60^\circ$
- Temperature range: -40 $^\circ\text{C}$ to +110 $^\circ\text{C}$



NEW PRODUCT INFORMATION



Product Group: Vishay Optoelectronics, Sensors / January 2022

Availability:

Samples and production quantities of the new 4-quadrant photodiode are available now, with lead times of 10 weeks.

To access the product datasheet on the Vishay Website, go to <http://www.vishay.com/ppg?80279> (K857PH)

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