



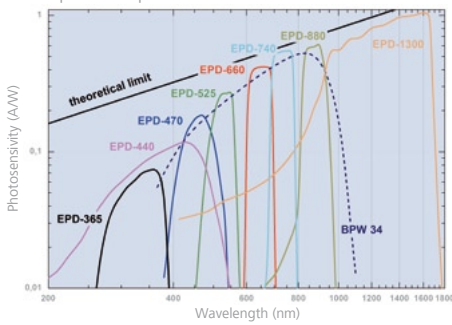
Selective Photodiodes – the optimized solution

There are many suitable receivers for the detection of optical signals. Conventional silicon photodiodes (Si Photodiodes) are frequently used. For specific applications, these photodiodes are combined with filter components to achieve the desired wavelength sensitivity range. In these cases, our selective photodiodes based on III-V semiconductors with an intrinsic wavelength filter are an attractive alternative with clear advantages compared to Si Photodiodes.



We design your success in optoelectronics

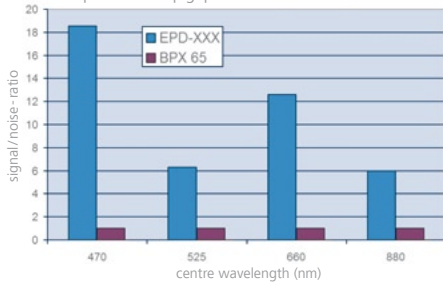
Spectral Response of Different Photodiodes



A³B⁵ – selective photodiodes

- used in measurement and control of all parts of the spectrum
- in blue and ultraviolet for water purification, burner control, ozone monitoring and laser detectors
- enables daylight sensors in the visible range
- lane departure warning systems and safety engineering systems in the infrared

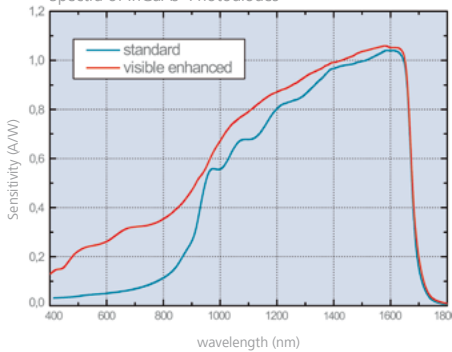
Comparison of Epigap's selective PD vs. BPX 65



Advantages

- high spectral sensitivity across different wavelength ranges
- integrated optical filters, no additional filters necessary
- very good signal-to-noise-ratio
- low dark currents
- high linearity of photocurrent
- high temperature stability and low degradation of sensitivity

Spectra of InGaAs-Photodiodes



InGaAs photodiodes

- standard type InGaAs photodiodes with a spectral response range of 800nm - 1750nm deliver high-speed response
- visible enhanced InGaAs photodiodes with a spectral response range of 400nm - 1750nm
- a wide variety of different standard active areas: 0.033; 0.2; 0.78; 7.1 mm²
- customized chip design on request



Advantages

- near infrared (NIR) detectors with small terminal capacitance
- a wide spectral range can be detected with a single detector
- feature low noise
- low dark current
- high-speed response
- can be used with InGaAs LED chips



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