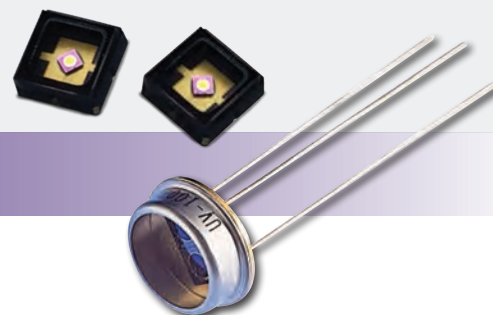


PIN Photodiodes

PIN PHOTODIODES ■

PIN Photodiodes
InGaAs and Si PIN Diodes,
Quadrant Detectors,
UV-Enhanced



Si and InGaAs PIN Diodes and Quadrants

Applications

- LiDAR
- Telecom
- Instrumentation
- Photometry
- Laser power monitoring
- Fiber optic test equipment
- High speed switching
- Spot tracking
- Laser range finders
- Missile guidance
- Laser warning system

Features and Benefits

- High speed
- High responsivity
- Hermetically-sealed
- Large area available
- High shunt resistance, low dark current
- Customization available upon request

Product Description

Excelitas is offering PIN Photodiodes for a broad wavelength spectrum from 400 nm to 1700 nm. Silicon PIN photodiodes are available in a wide variety of active areas to accommodate a large range of applications. The PIN structure allows high quantum efficiency and fast response for detection of photons in the 400 nm to 1100 nm range.

The YAG series offers an exceptional responsivity 0.4 A/W at 1060 nm by using a thick silicon material. Designed with a guard ring to collect current generated outside of the active area, they are the detectors of choice when the entire chip is illuminated by reducing unwanted carriers responsible for noise. Precise beam positioning can be achieved by using our quadrant detectors. The C30741 provides fast response and good quantum efficiency in the spectral range between 300 nm to 1100 nm. Designed for high-speed, high-volume production and cost-sensitive applications, these photodiodes are offered in plastic TO-style packages with a visible blocking filter option.

The InGaAs PIN detectors provide high quantum efficiency from 800 nm to 1700 nm. They feature low capacitance for extended bandwidth, high resistance for high sensitivity, high linearity, and uniformity within 2 % across the detector active area.

Product Table

InGaAs PIN, High Speed, Peak Wavelength at 1550 nm

Unit	Active Diameter μm	Typ. @ 1550 nm Responsivity Peak A/W	Typical Capacitance pF	Typical Bw GHz	Dark Current nA	Breakdown Voltage V	Operating Voltage V	Package
C30617BH	100	1.05	< 1.0	3.5	<1.0	100	5	TO-18, ball lens
C30617BFCH	100	1.05	< 1.0	3.5	<1.0	100	5	TO-18, FC receptacle
C30617BSCH	100	1.05	< 1.0	3.5	<1.0	100	5	TO-18, SC receptacle
C30617BQC-04-XX	100	1.05	< 1.0	3.5	<1.0	100	5	Pigtail or FC receptacle
C30617ECERH	100	1.05	< 1.0	3.5	<1.0	100	5	Ceramic carrier
C30617L-100	100	1.05	0.8	3.5	<1.0	100	5	SMT
C30617GH	100	1.05	<1.0	3.5	<1.0	100	5	TO-18
C30618BFCH	350	1.05	< 6.0	0.75	<1.0	80	5	TO-18, FC receptacle
C30618GH	350	1.05	< 6.0	0.75	<1.0	80	5	TO-18
C30618ECERH	350	1.05	< 6.0	0.75	<1.0	80	5	Ceramic carrier
C30618L-350	350	1.05	4.0	0.75	<1.0	80	5	SMT