Photodiode InGaAs PIN

detector area 10-500µm, TO-46

DATASHEET

Return to the Webpage

A PIN photodetector is a semiconductor photodiode with a P-type / Intrinsic / N-type layer structure that converts incident light into electrical current with high speed and excellent linearity. When light is absorbed in the undoped intrinsic (I) region, photons generate electron–hole pairs, and an applied reverse bias rapidly sweeps the carriers out, producing an output current proportional to the optical power. PIN photodiodes are widely used due to their high bandwidth (up to 100 GHz for small-area devices), excellent linearity (critical for analog and RF-over-fiber applications), low noise compared to APDs, stable operation, and high reliability. We offer cost-effective PIN photodiodes with flat-window and ball-lens window options to support a wide range of coupling and system requirements. A 5–10 V reverse bias is recommended for power monitoring, sensing, and low-noise operation, while 10–15 V is used when maximum bandwidth is required. A matching high-gain, high-linearity amplifier with DC–500 MHz bandwidth is also available.

Due to their high sensitivity to electrostatic discharge, warranty coverage applies only to fully metal covered modules. Photodetectors are not covered by warranty. Please use them with great caution.

Features

- Low Noise
- High Sensitivity
- TO-46 package size

Applications

- OEM
- Lab user
- Instruments

Specifications - 260µm

Parameter	Min	Typical	Max	Unit
Peak Sensing Wavelength		1300		nm
Operation Wavelength	900		1650	nm
Detector Area		260		µm
Bandwidth	DC		100	MHz
Ride/Fall Time	30		300	ns
Forward Voltage	0.5		1.3	V
Reverse Voltage		10	35	V
Reverse Dark Current		1	5	nA
Responsivity	0.8	0.9	1.1	A/W

Note: The specifications provided are for general applications with a cost-effective approach. If you need to narrow or expand the tolerance, coverage, limit, or qualifications, please [click this link]:

CAUTION: Device is highly sensitive to electrostatic discharge. Solder temperature <350°C <10 seconds

Rev 01/02/26

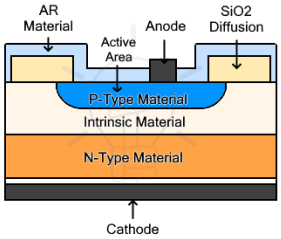
P +1 781-935-1200 E sales@agiltron.com W www.agiltron.com

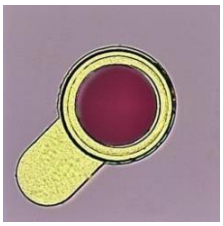
Photodiode InGaAs PIN

detector area 10-500µm, TO-46

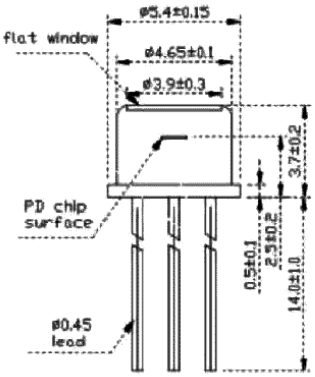
DATASHEET

Device Configuration



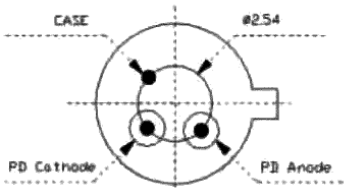


Mechanical Dimensions



large flat window TO

Model: L0



Type B PIN description

Bottom View

*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

Ordering Information

	1	□□□	□	□	□	11
Prefix	**Type**	**Sensor Area**	**Window**	**Driver**	**Package**	
PIND-	GaAs = 1 Silicon = 2 Special = 0	0.1GHz (~260µm) = 260 0.1GHz (~500 µm) = 500 1.25 GHz(~50 µm) = 050 3 GHz(~30 µm) = 030 5 GHz (~20 µm) = 020 10GHz (~10 µm) = 010	Flat = 2 Ball Lens = 1	Non = 1 5MHz = 2 500MHz = 3	Standard = 1 Special = 0	

P +1 781-935-1200 E sales@agiltron.com W www.agiltron.com

Photodiode InGaAs PIN

detector area 10-500µm, TO-46

DATASHEET

Caution Electrostatic Sensitivity

- Never touch laser diode and the module using hands
- Always use protections when handle a laser diode
- Recommend mounting the laser diode using an ionic gun and ESD finger cots

P +1 781-935-1200 E sales@agiltron.com W www.agiltron.com