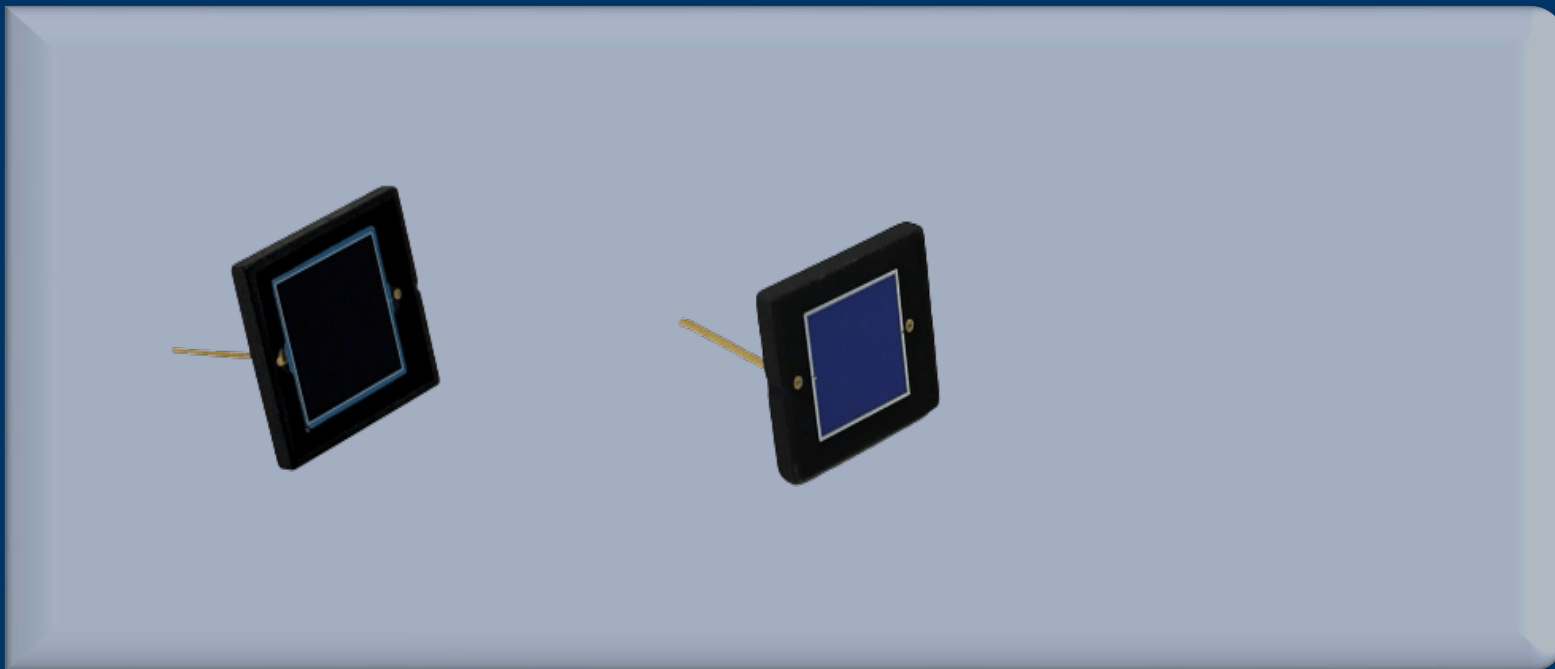


## Photodiodes

### Near-infrared enhanced silicon PIN photodiode (DIP package)

Passive photoelectric conversion device (DIP through-hole package)

- Accurately capture weak signals
- Low dark current + high linearity
- Strong environmental adaptability + low-cost maintenance



One Platform Many Possibilities

Contact Us [sales@venuslabtech.com](mailto:sales@venuslabtech.com)

Get a Quote



Get Expert Advice  
+658099 5547 ( WhatsApp )



Visit Us  
[www.venuslabtech.com](http://www.venuslabtech.com)

## Overview

### Introduction:

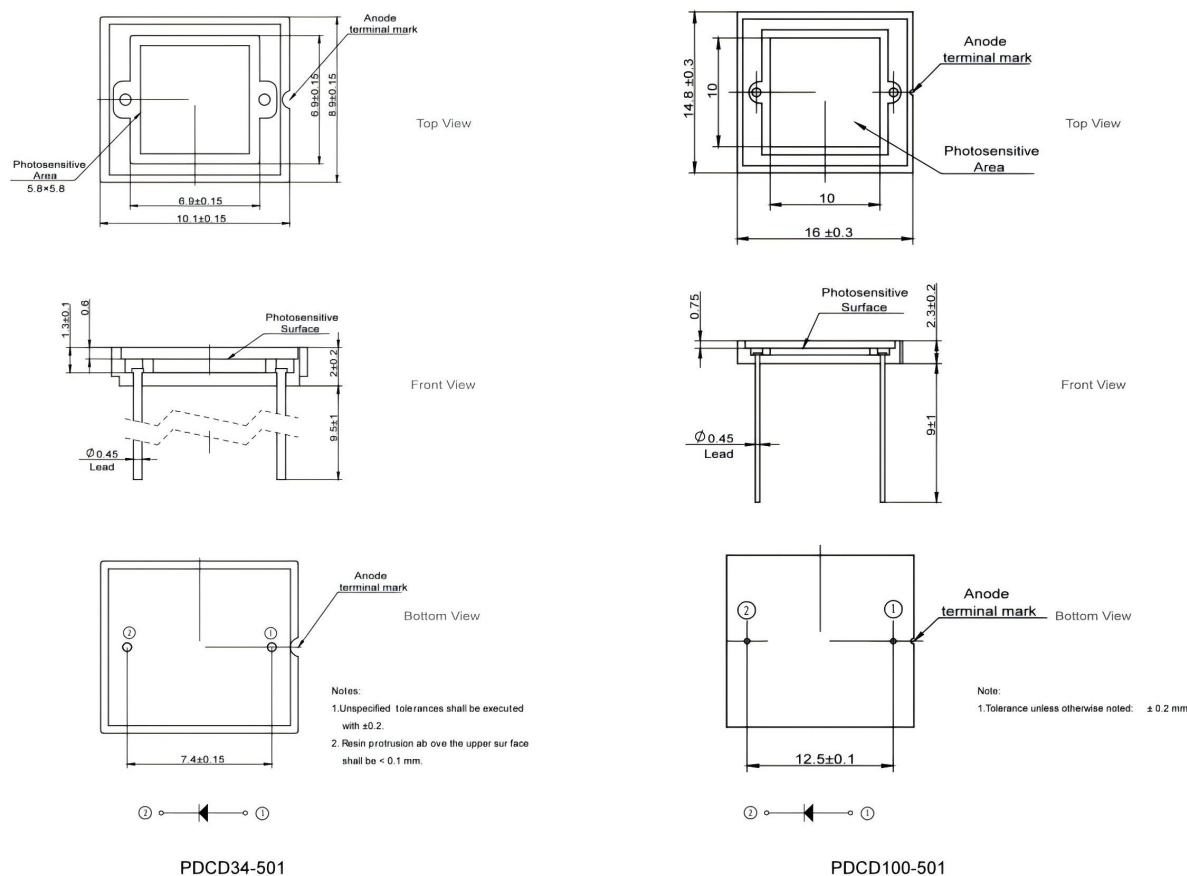
This device has a spectral response range of 350~1100nm, with optimized response for near-infrared wavelengths, and features low dark current. It is suitable for photoelectric measurement instruments, optical analysis equipment, and optical power monitoring scenarios.

It can adapt to anti-interference, high-speed, and low-power consumption scenarios without the need for additional peripheral chips, and can also simplify circuit design and reduce the overall solution cost.

### Features:

- With a silicon-based PIN structure as the core
- Equipped with a highly transparent photosensitive window
- Wide range of applicable operating voltages
- With photocurrent as the main output form

### Dimension:



## Specifications

Parameter Name	Parameter Value (PDCD34-501/PDCD100-501)
Spectral Response Range	350~1100nm
Package Type	DIP
Window Material	Epoxy Resin
Storage Temperature (Tstg)	-20~+80 (No Condensation)
Operating Temperature (Topr)	-20~+80 (No Condensation)
Maximum Reverse Voltage (VR MAX)	20V
Soldering Temperature (Tsol)	260 (<5s)
ESD (HBM Mode)	1000V

## Service & Support

We are dedicated to delivering exceptional optoelectronic solutions to every client. From precision manufacturing and secure delivery to full-lifecycle technical support, we are here to ensure a seamless and reliable experience at every step.

### 1. Warranty Policy

#### Quality First, Worry-Free Operation

**Warranty Period:** We offer a **two-year** warranty service for all of our core optoelectronic products, effective from the date of shipment.

**Coverage:** We provide free repair or replacement services for malfunctions caused by material defects or workmanship errors under normal operating conditions.

**Rapid Response:** Upon receiving a warranty claim, we guarantee to initiate the assessment process within **24 hours** to minimize your equipment downtime.

### 2. Technical Support

#### Expert Team, Full-Process Guidance

**Technical Consultation:** Our team of senior optical engineers provides **24/7 online support** to assist with installation, commissioning, optical path alignment, and parameter optimization.

**Scheduled Maintenance:** We offer full-lifecycle maintenance recommendations, including firmware upgrades, optical component cleaning guidelines, and precision calibration services.

**Training Services:** We provide customized remote or on-site operational and safety training to ensure your team can operate the equipment efficiently and safely.

### 3. Logistics & Delivery

#### Precision Packaging, Global Reach

**Professional Packaging:** Given the fragile nature of optical instruments, we utilize industrial-grade shockproof, anti-static, and moisture-proof vacuum packaging to ensure zero damage during transit.

**Logistics Partners:** We partner with top-tier global logistics providers (**DHL / FedEx / UPS / SF Express**) to offer reliable shipping with real-time tracking.

**Shipping Insurance:** All shipments are fully insured to eliminate logistics risks.

### 4. Compliance & Certification

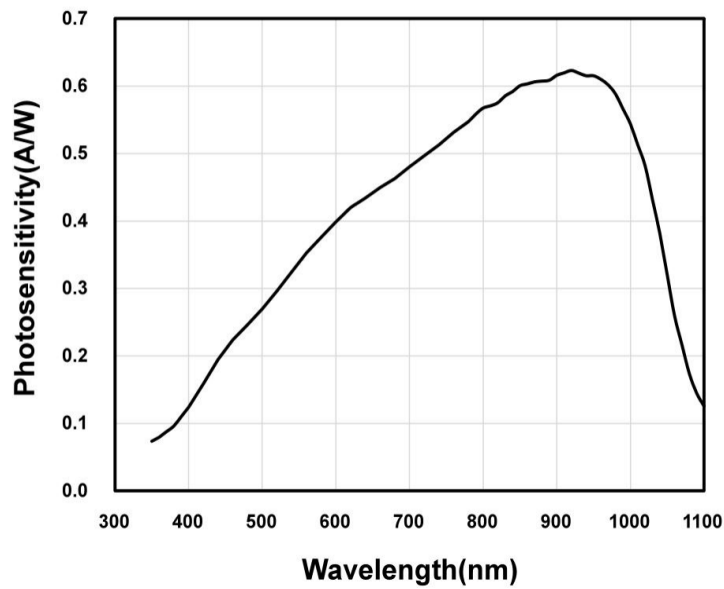
#### Strict Standards, Total Compliance

**Quality Certification:** Our manufacturing process is **ISO 9001 certified**, and our products comply with international standards such as **CE** and **RoHS**.

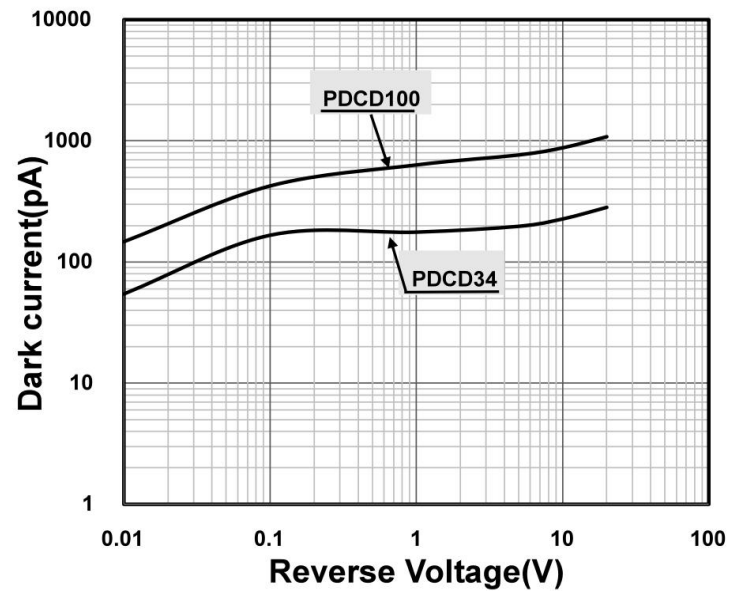
**Export Compliance:** "Committed to environmental responsibility, all our products comply with **RoHS 2.0** and **REACH** standards, ensuring safety and global compliance."

## Applications

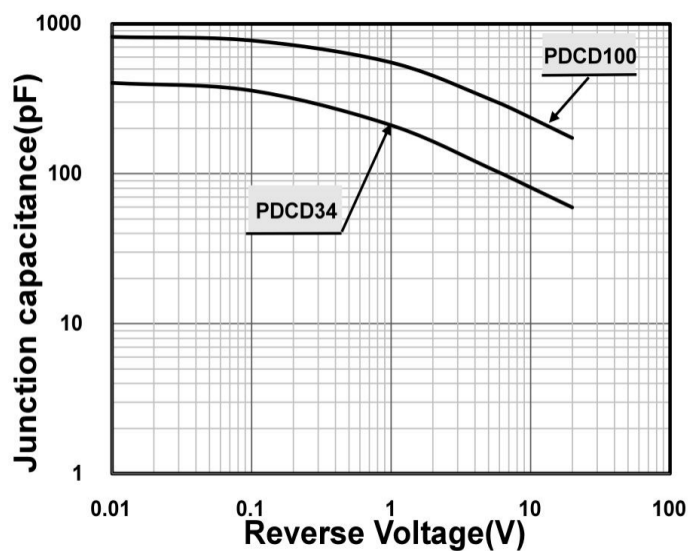
### Spectral response



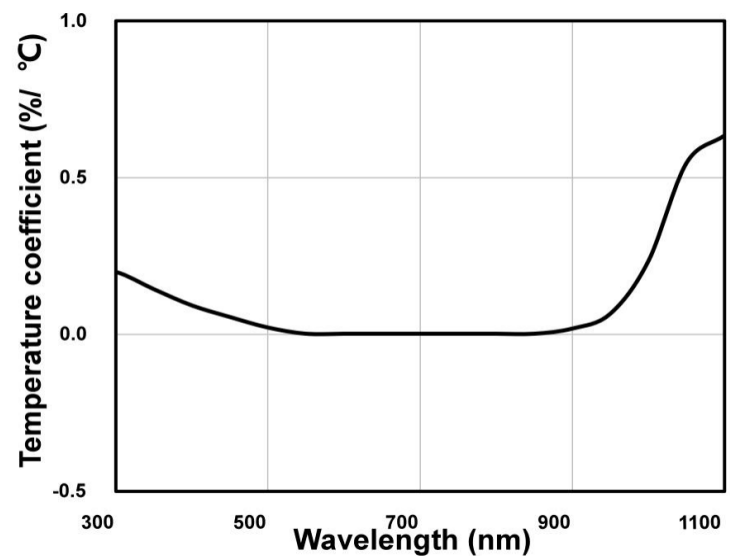
### Dark current vs. reverse voltage



### Junction capacitance vs. reverse voltage



### Photosensitivity temperature characteristics



## Explore Series

Model	Photosensitive Area Size	Maximum Dark Current (I <sub>D</sub> , V <sub>R</sub> =0V)	Junction Capacitance (C <sub>j</sub> , V <sub>R</sub> =10mV)	Noise Equivalent Power (NEP)	Rise Time (tr)	Peak Responsivity Wavelength & Photoresponse
PDCD34-501	5.8×5.8mm	0.9pA	300pF	1.5×10 <sup>-14</sup> W/Hz <sup>1/2</sup>	50μs	920nm (0.62A/W)
PDCD100-501	10×10mm	1.8pA	900pF	2.5×10 <sup>-14</sup> W/Hz <sup>1/2</sup>	150μs	1064nm (0.26A/W)

📧 Get in touch with our team to explore configurations, request a quote, or learn more about customized solutions tailored to your needs.

Let us help you move science forward—faster and smarter.

[Get a Quote](#)



Get Expert Advice  
+658099 5547 (WhatsApp)



Visit Us  
[www.venuslabtech.com](http://www.venuslabtech.com)