VENUSLAB
OPTOELECTRONICS

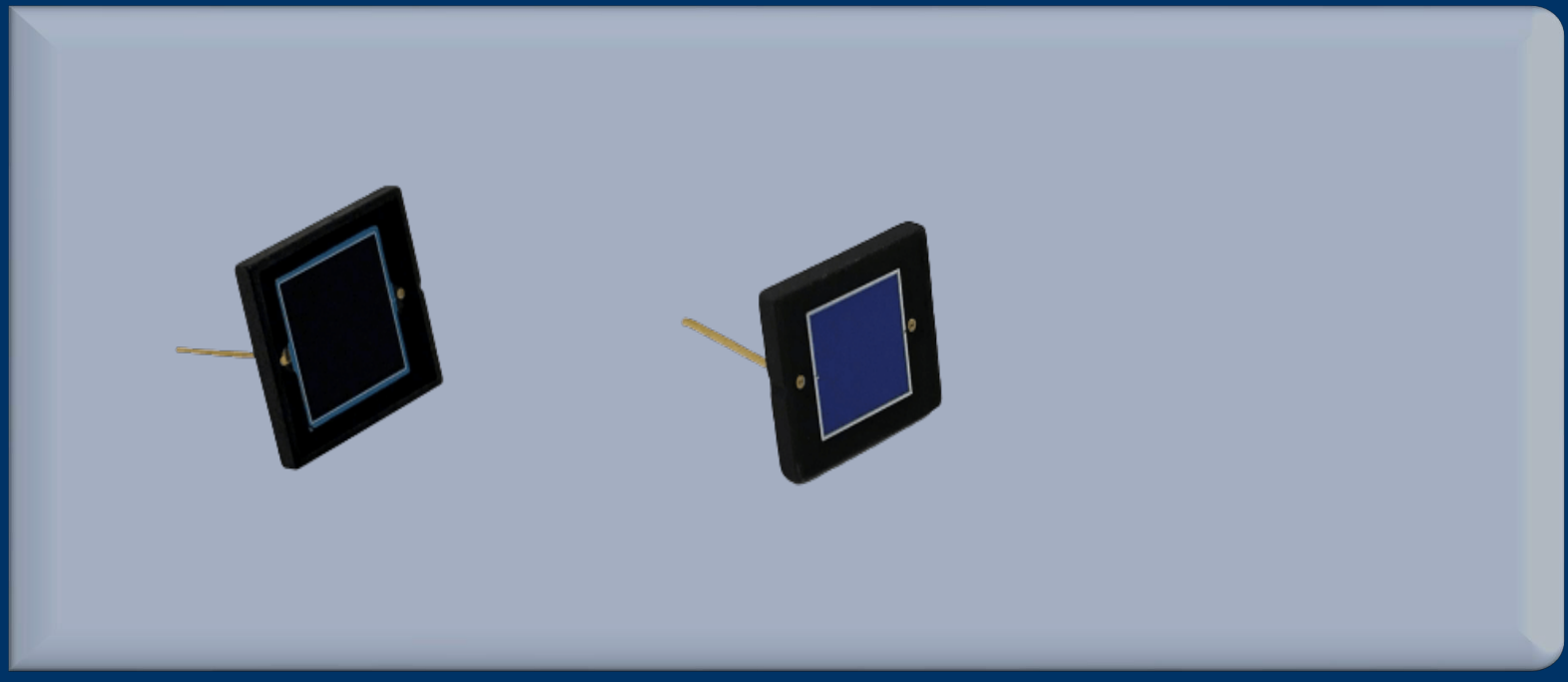
Precision Meets Simplicity

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

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Get Expert Advice
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Near-infrared enhanced silicon PIN photodiode (DIP package)

Overview

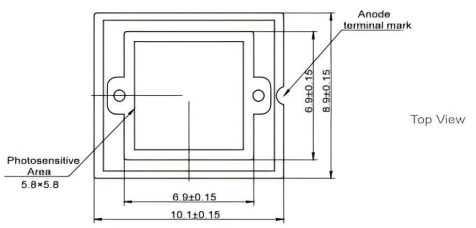
Introduction:

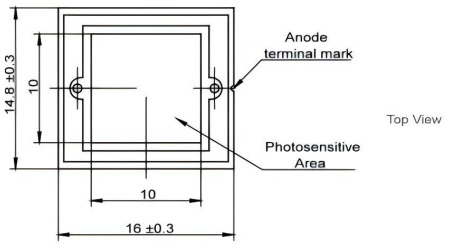
This device has a spectral response range of 350~1100nm, with optimized response for near-infrared wavelengths, and features low dark current. It is suitable for photoelectric measurement instruments, optical analysis equipment, and optical power monitoring scenarios.
It can adapt to anti-interference,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

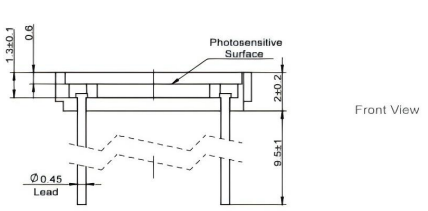
Features:

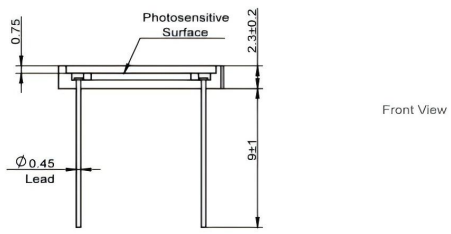
- With a silicon-based PIN structure as the core
- Equipped with a highly transparent photosensitive window
- Wide range of applicable operating voltages
- With photocurrent as the main output form

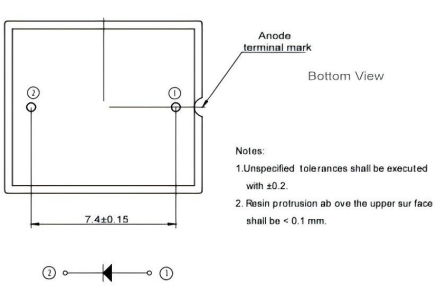
Dimension:



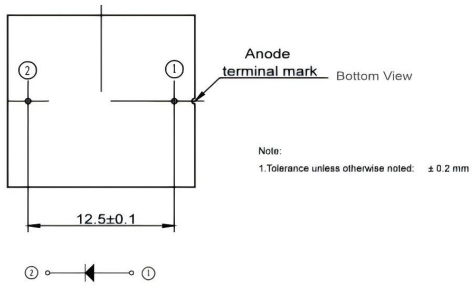








PDCD34-501



PDCD100-501

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

Serivce & 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

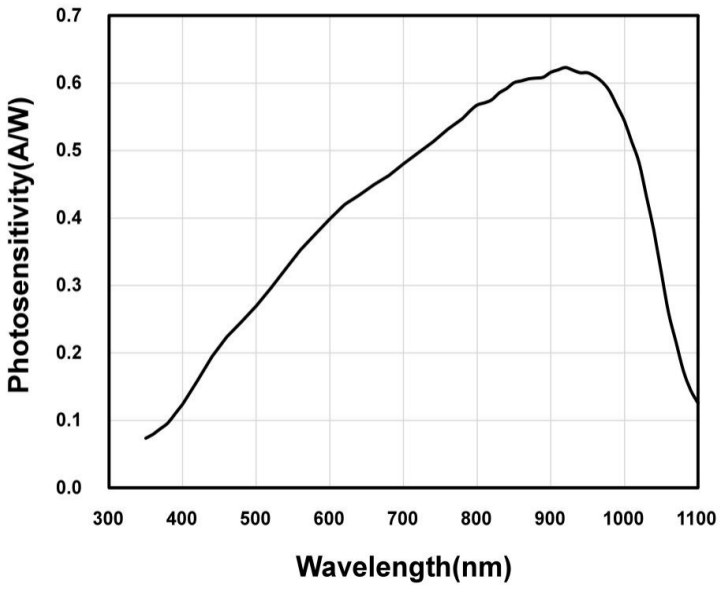
Quality Certification: Our manufacturing process is **ISO 9001 certified**, and our products comply with international standards such as **CE** and **RoHS.**

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

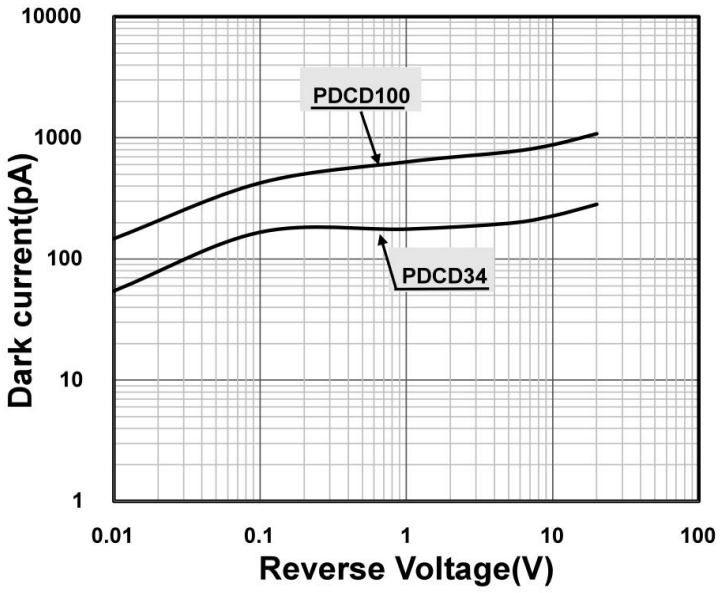
Near-infrared enhanced silicon PIN photodiode (DIP package)

Applications

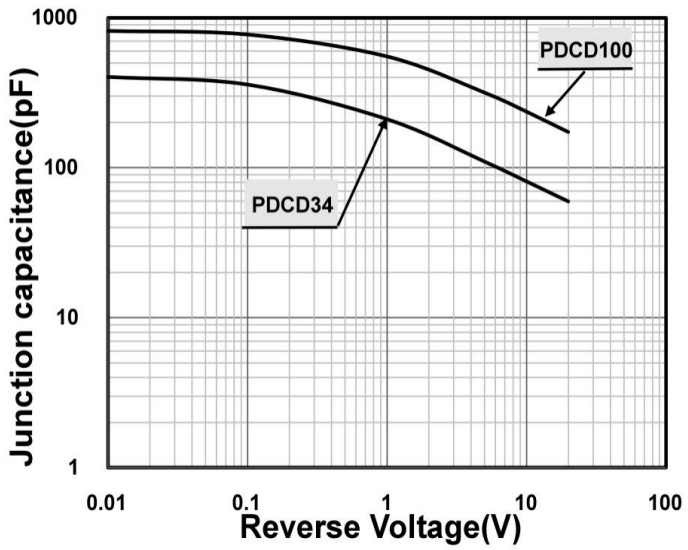
Spectral response



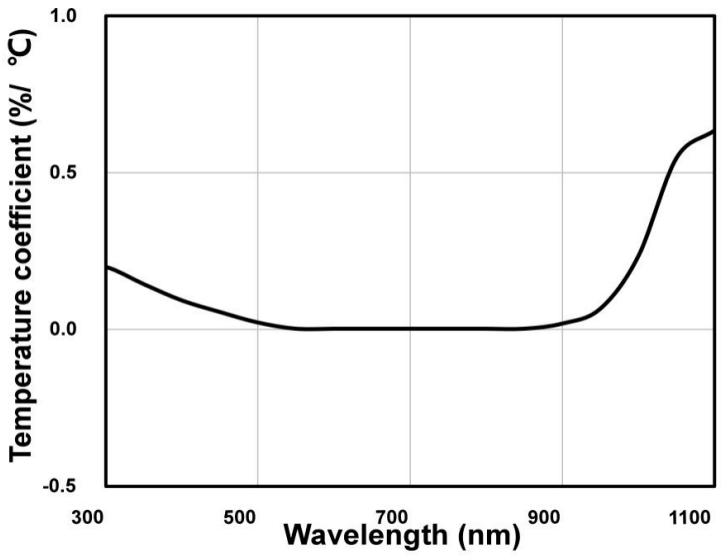
Dark current vs. reverse voltage



Junction capacitance vs. reverse voltage



Photosensitivity temperature characteristics



Explore Series

Model	Photosensitive Area Size	Maximum Dark Current (ID, VR=0V)	Junction Capacitance (Cj, VR=10mV)	Noise Equivalent Power (NEP)	Rise Time (tr)	Peak Responsivity Wavelength & Photoresponse
PDCD34-501	5.8×5.8mm	0.9pA	300pF	1.5×10^{-14} W/Hz$^{1/2}$	50μs	920nm (0.62A/W)
PDCD100-501	10×10mm	1.8pA	900pF	2.5×10^{-14} W/Hz$^{1/2}$	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 moves cience forward—faster and smarter.