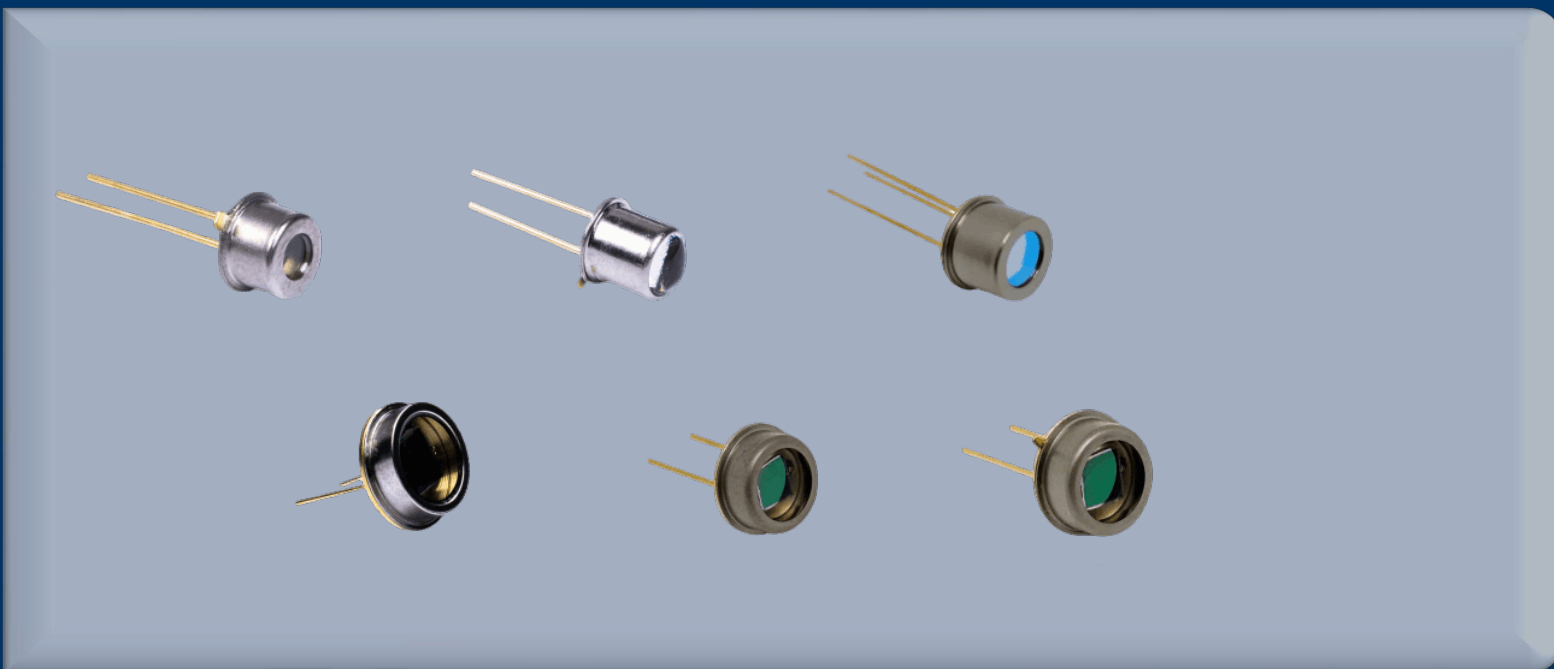


# Photodiodes

## Low Dark Current Silicon PIN Photodiode (TO packaging)

Silicon PIN structure photoelectric conversion device

- Flexible packaging adaptation
- Extremely low dark current
- Industrial-grade tolerance
- Fast response speed



One Platform Many Possibilities

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## Overview

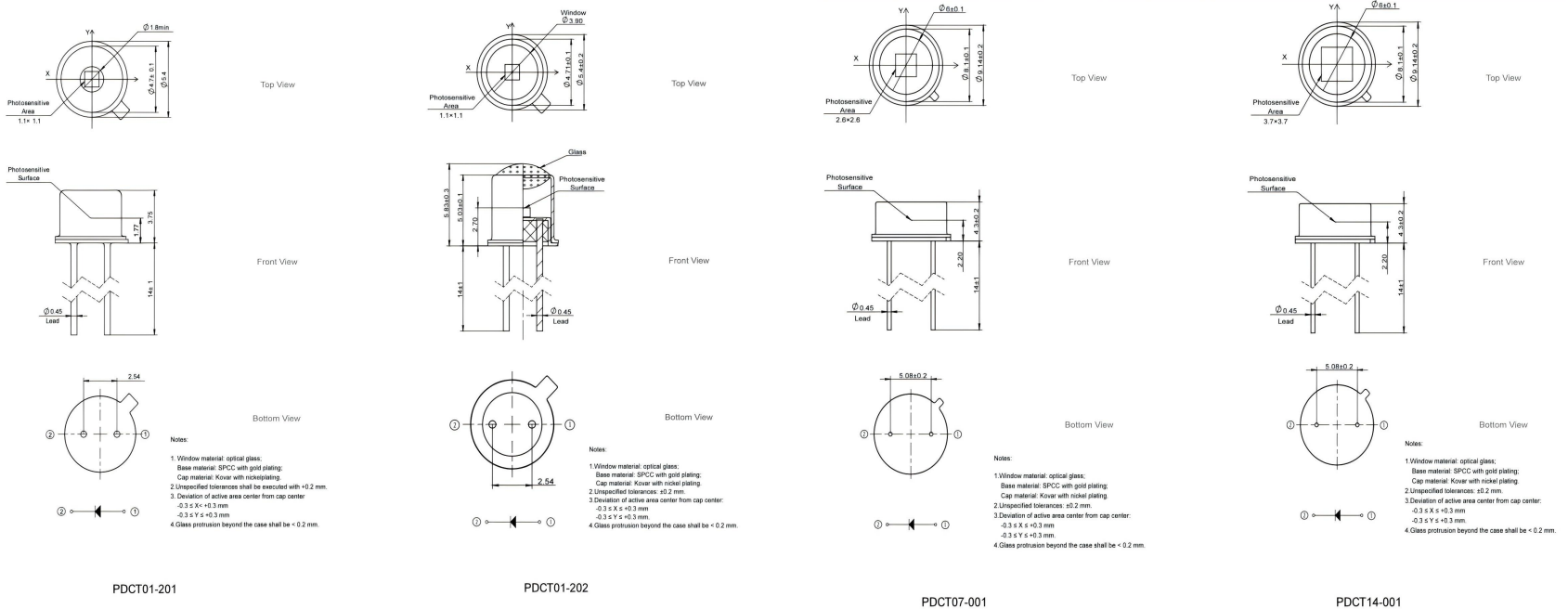
### Introduction:

It has a spectral response range of 350~1060nm, with the advantages of extremely low dark current and low junction capacitance. It adopts TO packaging and is suitable for scenarios such as optical power detection and optical analysis equipment. The photosensitive surface size, optical window type, and number of pins can be customized according to requirements (such as non-standard photosensitive surface sizes), flexibly meeting the installation and detection needs of different devices.

### Features:

- Ultra-low dark current, accurate weak light detection
- TO package for flexible adaptation
- Wide spectrum + fast response
- Industrial-grade environmental tolerance

### Dimension:



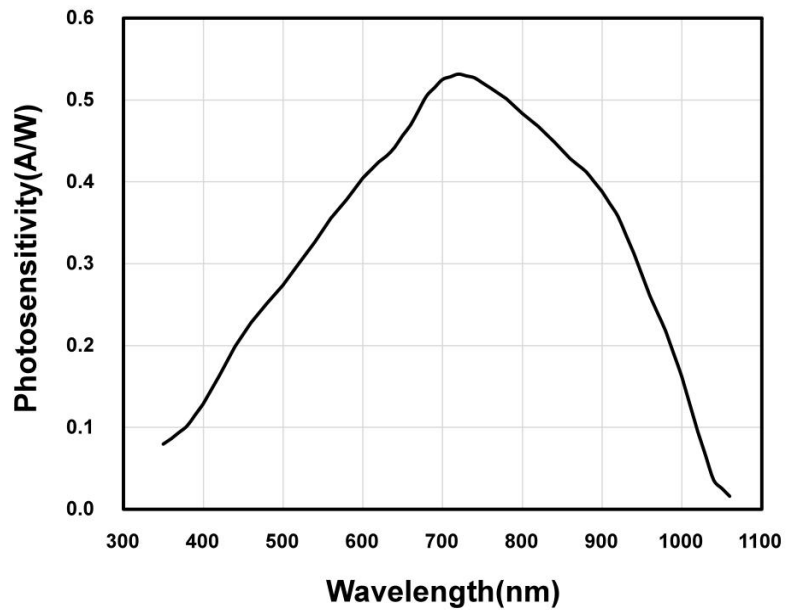
## Specifications

### Common Parameter Specification Table

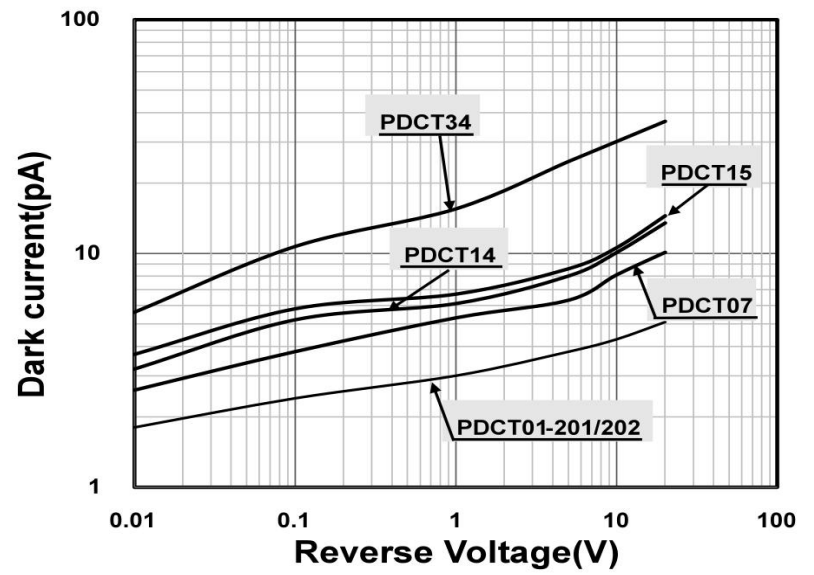
Core Parameter Item	Parameter Value
Device Type	Low Dark Current Silicon PIN Photodiode
Spectral Response Range	350~1060 nm
Package Category	TO Package (Including TO18/TO5/TO8 Subtypes)
Maximum Reverse Voltage (V <sub>R</sub> MAX)	20 V
ESD Protection (HBM Mode)	1000 V
Operating Temperature Range (No Condensation)	-40~+100
Storage Temperature Range (No Condensation)	-55~+125
Withstand Soldering Temperature	260 (Duration 10s)

## Applications

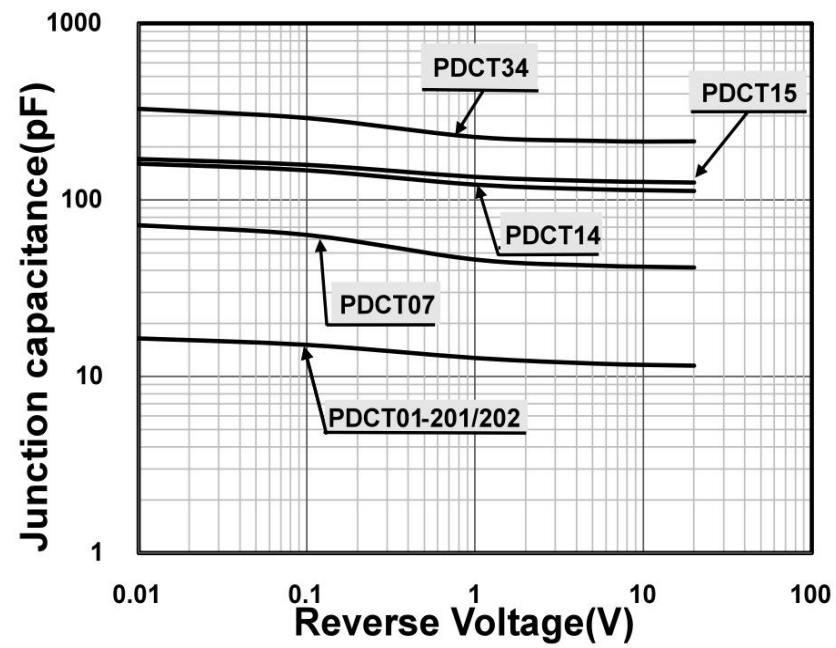
### Spectral response



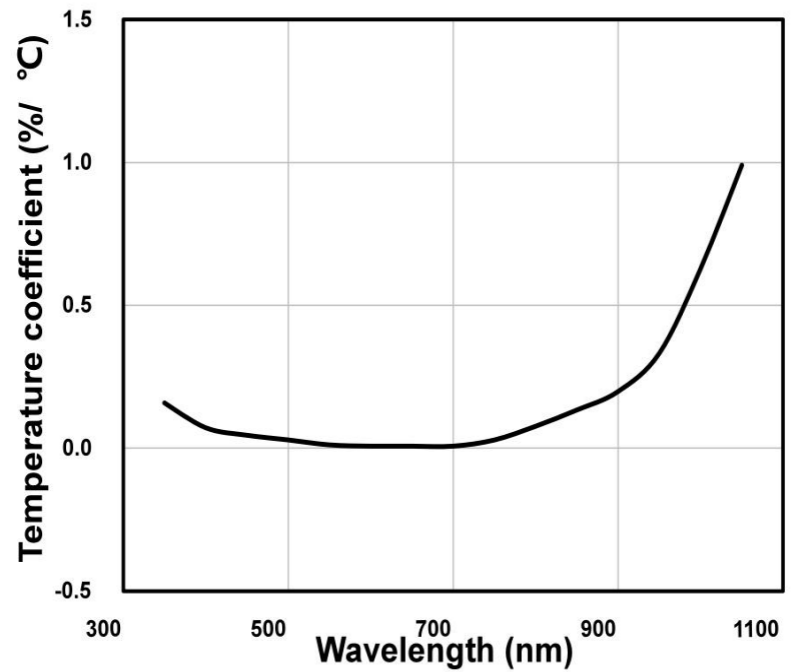
### Dark current vs. reverse voltage



### Junction capacitance vs. reverse voltage



### Photosensitivity temperature characteristics



## 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."

## Explore Series

Model	Photosensitive Area Size (with Shape)	Rise Time (Typ., $\mu$ s)	Junction Capacitance (Typ., pF)	Dark Current (Typ./Max., pA)	Package Subtype (Including Window)	Equivalent Noise Power (Typ., W/Hz <sup>2</sup> )
PDCT01-201	1.1×1.1mm (Square)	0.04	1.125	1/6	TO18, Optical Glass/Flat Window	1.7×10 <sup>-15</sup>
PDCT01-202	1.1×1.1mm (Square)	0.04	1.125	1/6	TO18, Large Ball Lens	1.7×10 <sup>-15</sup>
PDCT07-001	2.6×2.6mm (Square)	0.15	70	2.5/15	TO5, Optical Glass/Flat Window	2.4×10 <sup>-15</sup>
PDCT14-001	3.7×3.7mm (Square)	0.35	160	3.5/20	TO5, Optical Glass/Flat Window	4.5×10 <sup>-15</sup>
PDCT15-001	3.9×3.9mm (Square)	0.37	170	3.5/20	TO5, Optical Glass/Flat Window	4.5×10 <sup>-15</sup>
PDCT34-101	5.8×5.8mm (Square)	0.77	350	5/30	TO8, Optical Glass/Flat Window	1.1×10 <sup>-14</sup>

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

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