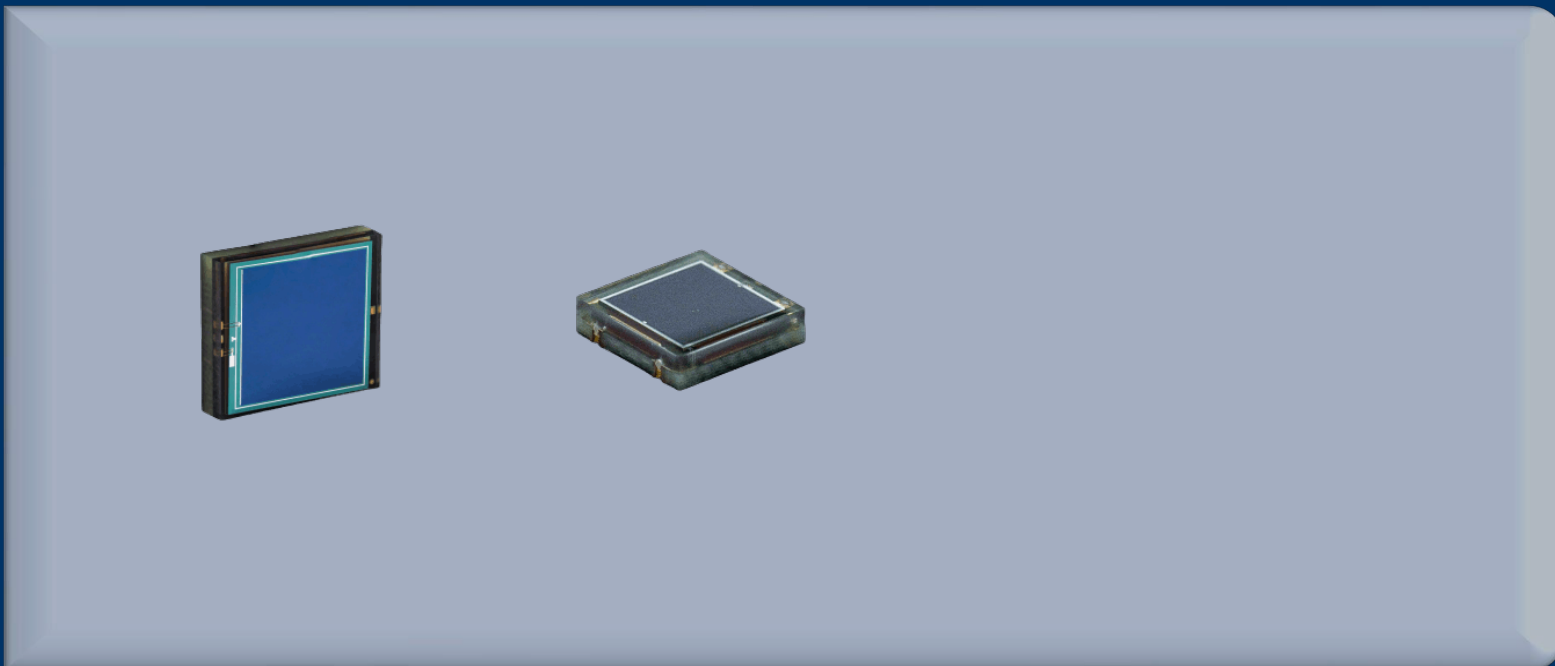


Photodiodes

Near-infrared enhanced silicon PIN photodiode (COB package)

Silicon-based PIN structure photoelectric conversion devices optimized for response efficiency in the near-infrared band

- Enhanced near-infrared response
- Low dark current and high precision
- Resistance to basic environments
- Friendly to mass production costs



One Platform Many Possibilities

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Overview

Introduction:

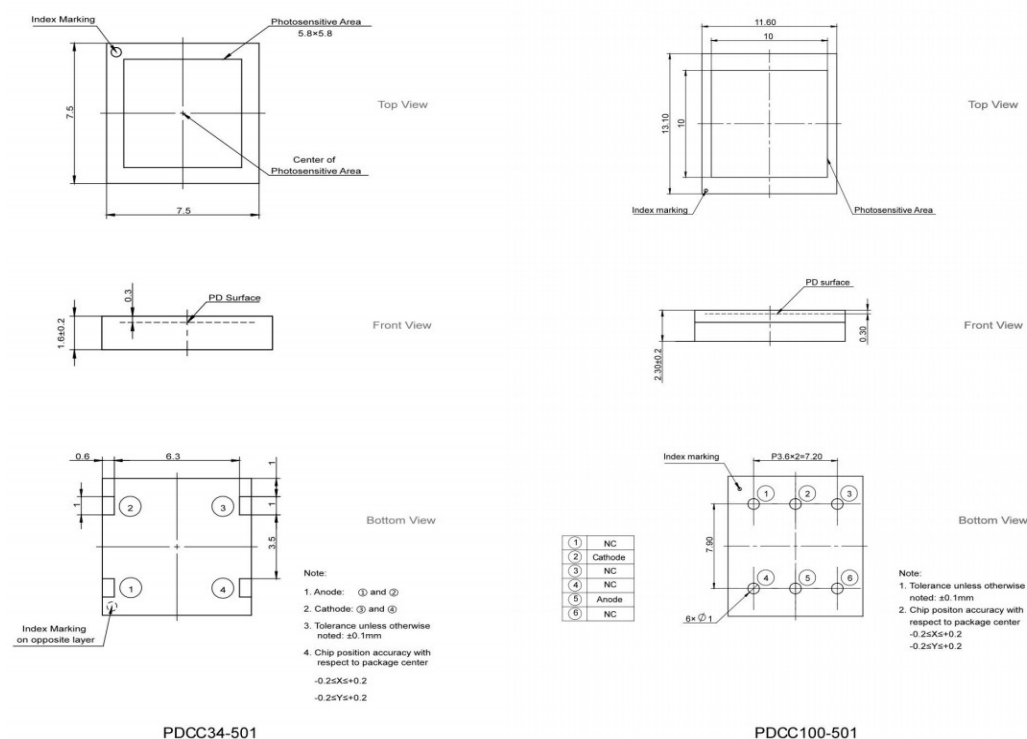
This device has a spectral response range covering 350~1100nm, featuring both optimized near-infrared wavelength response and low dark current characteristics. It is suitable for photoelectric measurement instruments, optical analysis equipment, and optical power monitoring scenarios.

It accurately converts near-infrared light signals into electrical signals, especially overcoming the shortcoming of ordinary silicon PIN photodiodes in their response to the near-infrared band, making them suitable for scenarios such as near-infrared detection, communication, and sensing.

Features:

- Wire bonding with low resistance and low loss
- Near-infrared custom anti-reflection coating to prevent stray light
- Multi-chip array with precise spacing control
- Package protective layer selected according to needs
- Low junction capacitance, suitable for high-frequency signals
- Low temperature drift to ensure data consistency

Dimension:



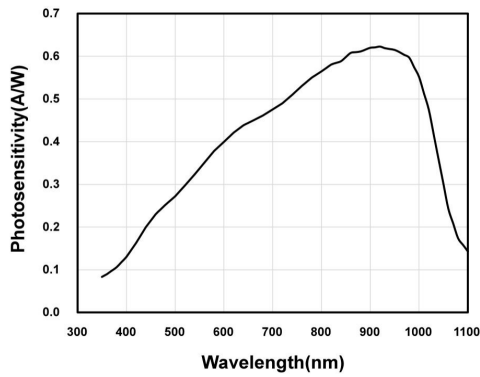
Specifications

Common Parameter Specification Table

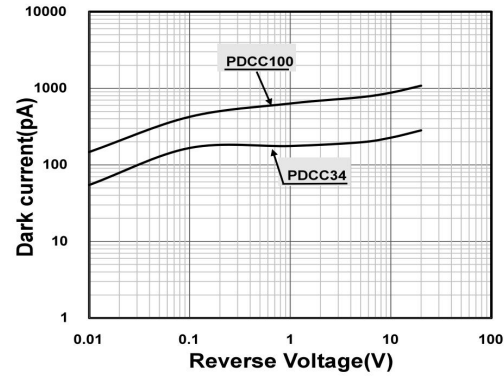
Core Same Parameters	Parameter Value
Package Type	COB Package
Spectral Response Range	350~1100nm
Storage Temperature (No Condensation)	-20~+80
ESD Protection (HBM Mode)	1000V
Maximum Reverse Voltage (V _R MAX)	20V
Soldering Temperature (T _{sol})	260 (PDCC100-501 marked <5s)

Applications

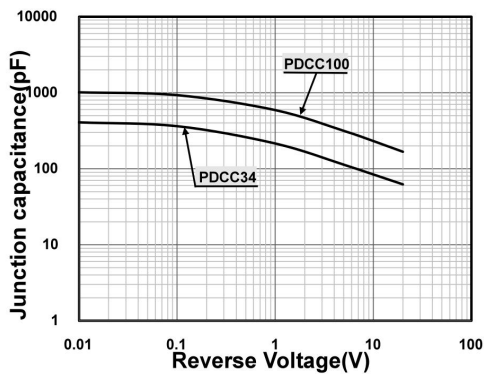
Spectral response



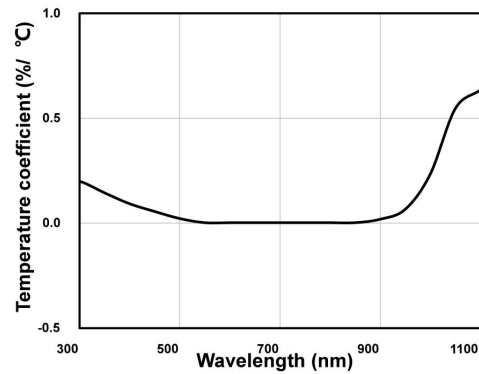
Dark current vs. reverse voltage



Junction capacitance vs. reverse voltage




Photosensitivity temperature characteristics



Explore Series

Model	Photosensitivity (Typ., A/W)	Junction Capacitance (f=100kHz, V _R =0V, Typ./Max., pF)	Photosensitive Area Size (mm)	Window Material	Rise Time (R _L =1k Ω , V _R =0V, Typ., μ s)	Dark Current (V _R =10mV, Typ./Max., pA)
PDCC34-501	0.43@633nm, 0.62@920nm	400/500	5.8x5.8	Resin	0.9	60/360
PDCC100-501	0.24@1064nm	1000/1200	10x10	Resin	2.2	150/900

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