
Features

- 100 mm² PIN detector
- Low dark current
- High shunt resistance
- High sensitivity
- Fully depletable

Description

Square active area PIN photodiode with 100 mm² active area. Ceramic carrier type LCC10 package with glass window (#501317). Reflow solderable silicon potting on request (#501288).

Application

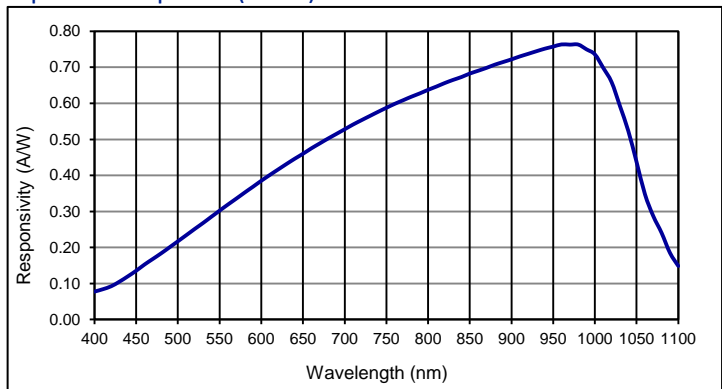
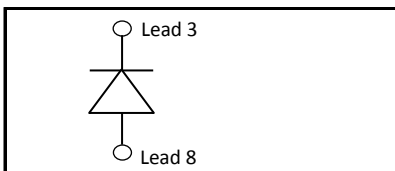
- Precision photometry
- Medical equipment
- Pulsed light sensor

RoHS

2002/95/EC


Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T _{STG}	Storage temp	-40	100	°C
T _{OP}	Operating temp	-20	70	°C
V _{max}	Max reverse voltage		300	V
I _{PEAK}	Peak DC current		10	mA

Spectral response (23 °C)

Schematic

Electro-optical characteristics @ 23 °C

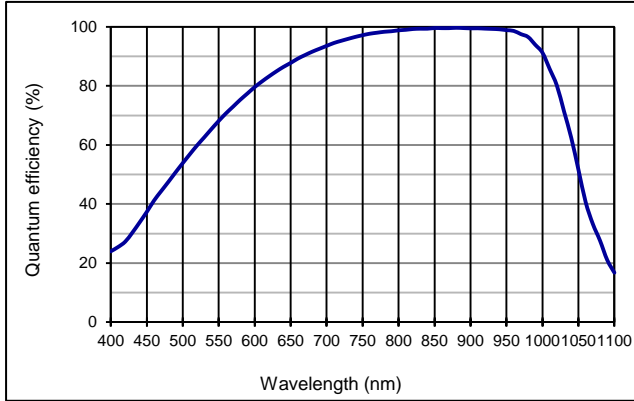
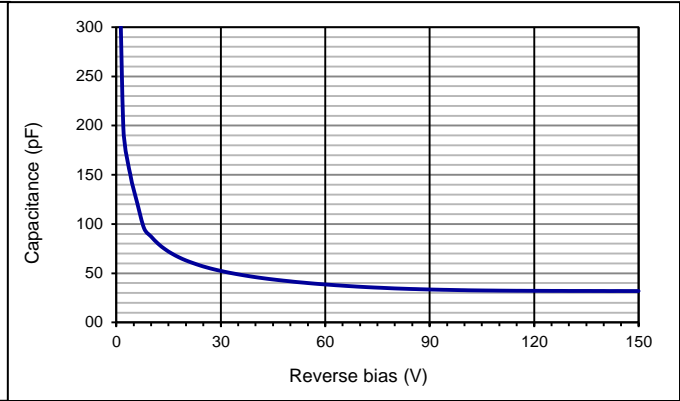
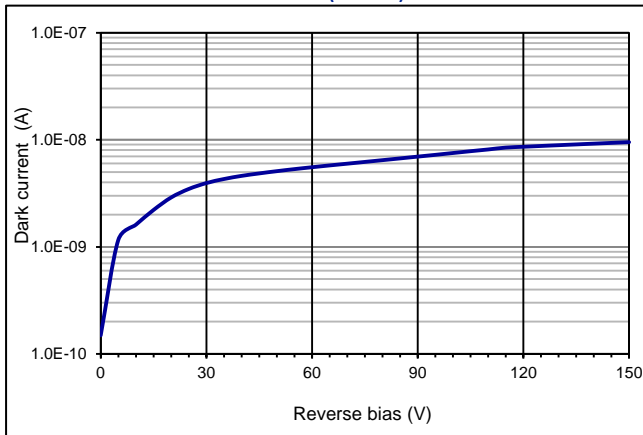
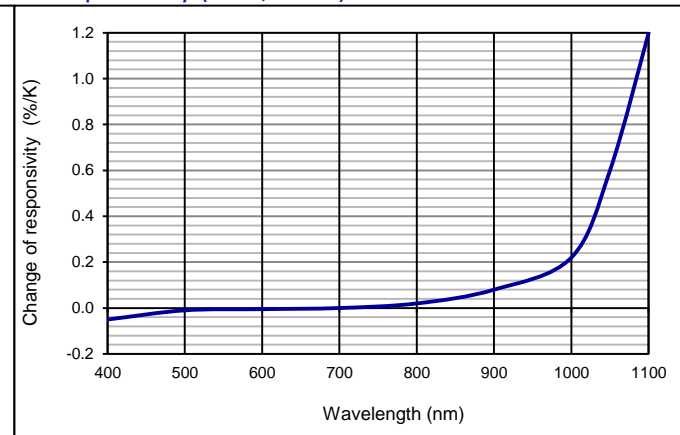
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area			10 x 10		mm
	Active area			100		mm ²
I _D	Dark current	V _R = 10 V		1.5	6	nA
		V _R = 150 V		10	30	nA
T _K (I _D)	Temperature coefficient	V _R = 10 V; change of dark current		13		%/K
C	Capacitance	V _R = 10 V; f = 10 kHz		90		pF
		V _R = 150 V; f = 10 kHz		32		pF
	Responsivity	λ = 800 nm		0.61		A/W
		λ = 900 nm		0.69		A/W
t _R	Rise time	V _R = 150 V; λ = 905 nm; R _L = 50 Ω		6		ns
	Shunt Resistance	V _R = 10 mV	35	65		MΩ
	N.E.P.	V _R = 150 V; λ = 905 nm		8.7 E-14		W/√Hz
V _{BR}	Breakdown voltage	I _R = 2 μA	300	500		V

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Quantum efficiency (23 °C)

Capacitance as fct of reverse bias (23 °C)

Dark current as fct of bias (23 °C)

Temperature coefficient of responsivity (10 V, 23 °C)

Package dimension:

Small quantities: Foam pad, boxed (12 cm x 16.5 cm)

Handling:

Please refer to document "Instructions for handling and processing"

Disclaimer: Due to our strive for continuous improvement, specifications are subject to change within our PCN policy according to JESD46C.

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