
Features

- 50 mm² PIN detector
- Low dark current
- High shunt resistance
- High sensitivity

Description

Circular active area PIN photodiode with 50 mm² active area. Metal can type hermetic TO8S package with clear glass window; isolated package available (#500923).

Application

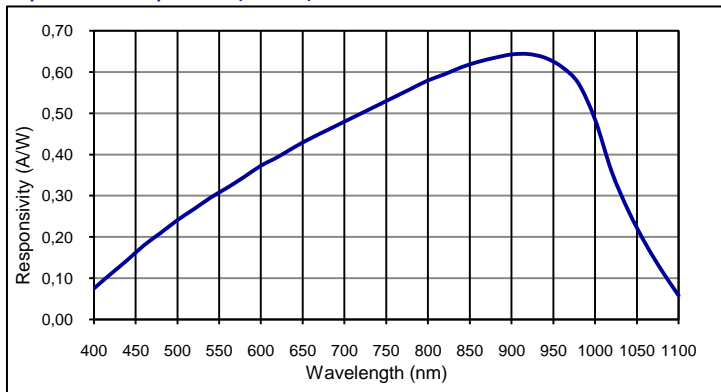
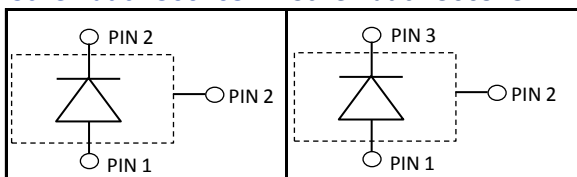
- Precision photometry
- Medical equipment
- Pulsed light sensor

RoHS

2002/95/EC


Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T _{STG}	Storage temp	-55	125	°C
T _{OP}	Operating temp	-40	100	°C
V _{max}	Max reverse voltage		30	V
I _{PEAK}	Peak DC current		10	mA

Spectral response (23 °C)

Schematic #500103
Schematic #500923

Electro-optical characteristics @ 23 °C

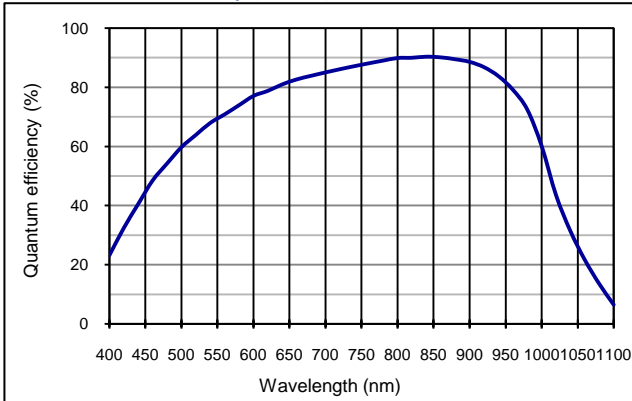
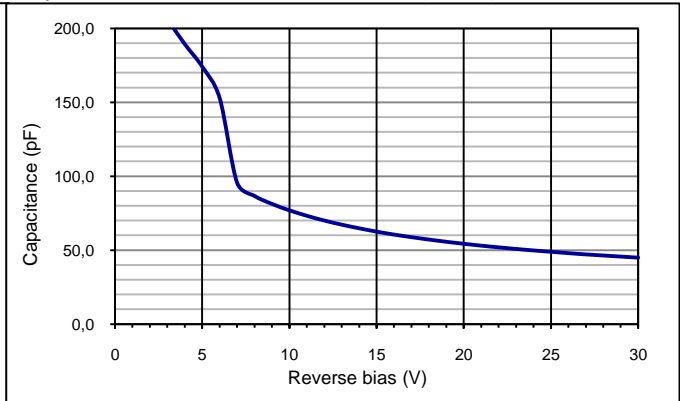
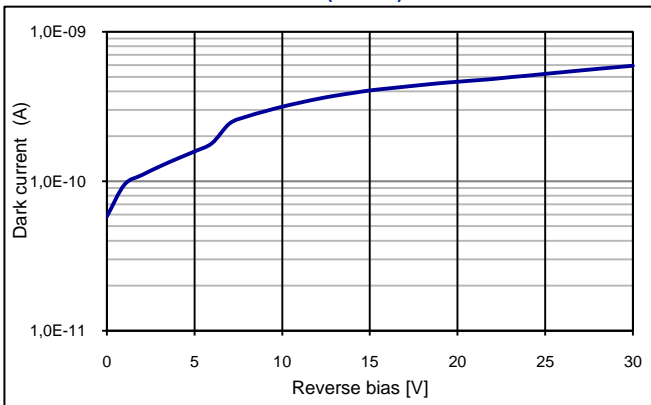
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		diameter 7980			µm
	Active area		50			mm ²
I _D	Dark current	V _R = 10 V		0.5		nA
C	Capacitance	V _R = 0 V		480		pF
		V _R = 10 V		100		pF
		λ = 632 nm		0.4		A/W
	Responsivity	λ = 900 nm		0.64		A/W
		V _R = 0 V; λ = 850 nm; R _L = 50 Ω		2000		ns
t _R	Rise time	V _R = 10 V; λ = 850 nm; R _L = 50 Ω		30		ns
		V _R = 20 V; λ = 850 nm; R _L = 50 Ω		18		ns
		V _R = 80 V; λ = 850 nm; R _L = 50 Ω		7		ns
				100	300	
	N.E.P.	V _R = 10 V; λ = 900 nm		2 E-14		W/√Hz
V _{BR}	Breakdown voltage	I _R = 2 µA	30			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)

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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