
Features

- 10 mm² PIN detector
- Low dark current
- Fast rise time, low capacitance
- High QE at 1064 nm
- Fully depletable

Description

Circular active area PIN photodiode with 10 mm² active area. Metal can type isolated and hermetic TO8 package with clear glass window.

Application

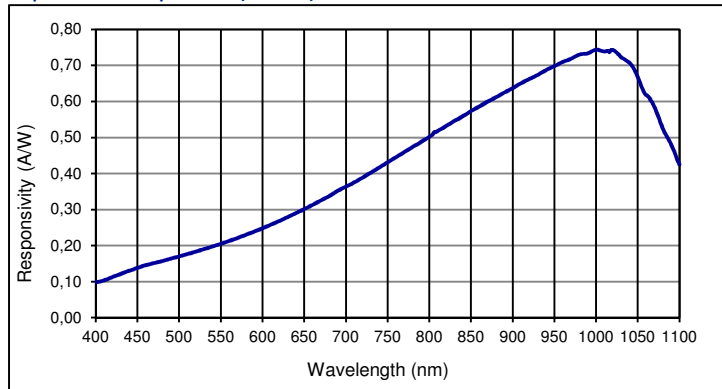
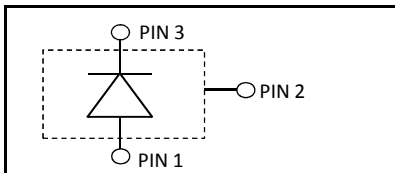
- Precision photometry
- 1064 nm laser detection
- Pulsed light sensor

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		200	V
I _{PEAK}	Peak DC current		10	mA

Spectral response (23 °C)

Schematic

Electro-optical characteristics @ 23 °C

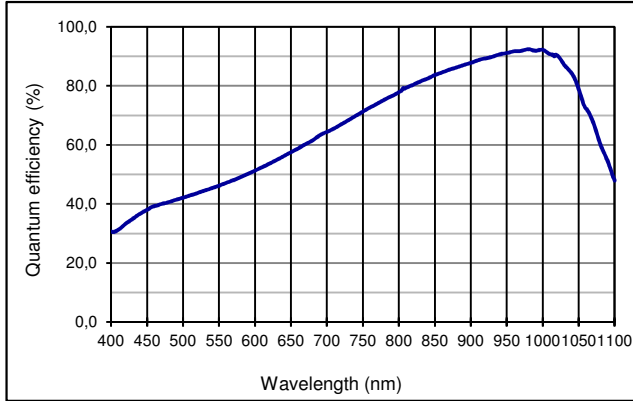
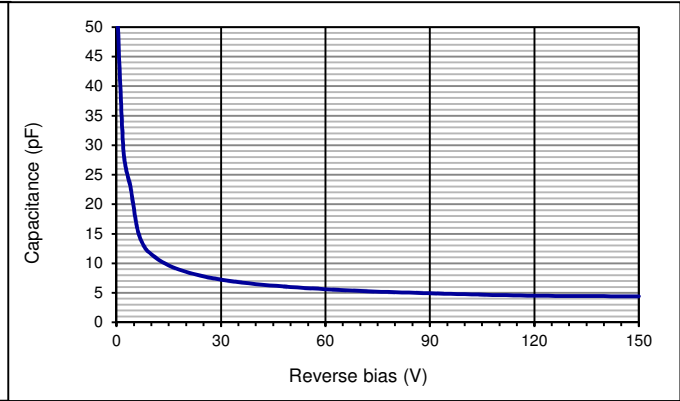
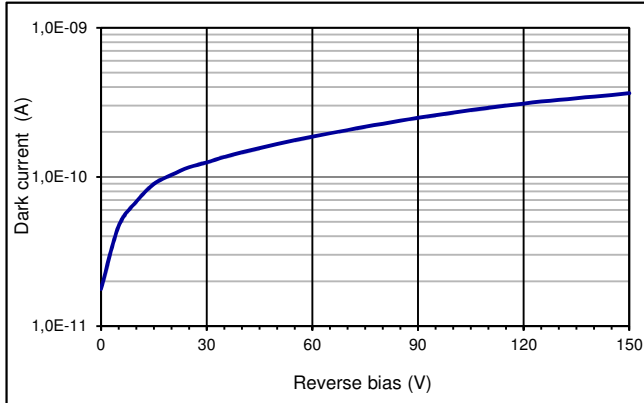
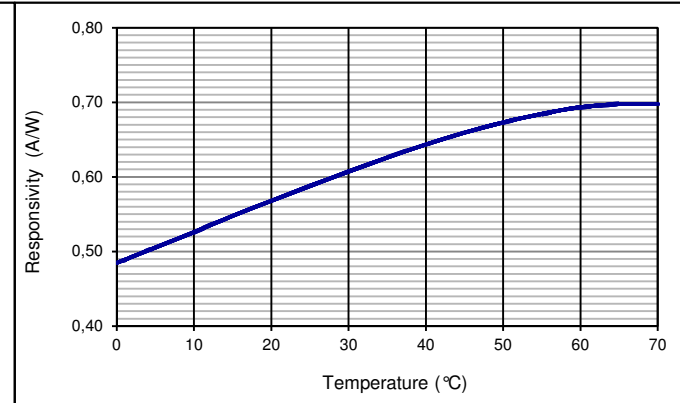
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		diameter 3578			μm
	Active area		10			mm ²
I _D	Dark current	V _R = 10 V		2.5	5	nA
		V _R = 150 V		5	10	nA
T _K (I _D)	Temperature coefficient	V _R = 10 V; change of dark current		15		%/K
C	Capacitance	V _R = 10 V; f = 10 kHz		7.5		pF
		V _R = 150 V; f = 10 kHz		4.5		pF
	Responsivity	λ = 900 nm		0.60		A/W
		λ = 1064 nm	0.48	0.55	0.65	A/W
t _R	Rise time	V _R = 150 V; λ = 1064 nm; R _L = 50 Ω		10		ns
	Shunt Resistance	V _R = 10 mV		1000		MΩ
	N.E.P.	V _R = 150 V; λ = 1064 nm		1.4 E-14		W/√Hz
V _{BR}	Breakdown voltage	I _R = 2 μA	200	300		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)

Responsivity as funtion of temperature (10 V)

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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