

### Features

- 20 mm<sup>2</sup> PIN detector
- Low dark current
- High shunt resistance
- High sensitivity
- Fully depleteble

### Description

Circular active area PIN photodiode with 20 mm<sup>2</sup> active area. Metal can type isolated and hermetic TO8S package with clear glass window.

### Application

- Precision photometry
- Medical equipment
- Pulsed light sensor

### RoHS

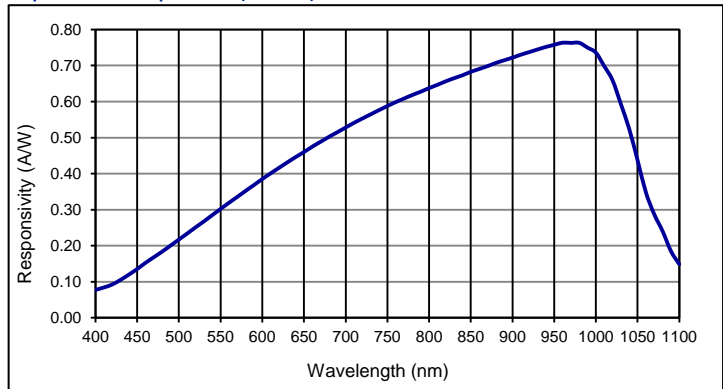
2002/95/EC



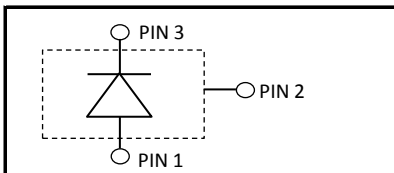
### Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T <sub>STG</sub>	Storage temp	-55	125	°C
T <sub>OP</sub>	Operating temp	-40	100	°C
V <sub>max</sub>	Max reverse voltage		300	V
I <sub>PEAK</sub>	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 5046			µm
	Active area		20			mm <sup>2</sup>
I <sub>D</sub>	Dark current	V <sub>R</sub> = 10 V		0.2	0.8	nA
		V <sub>R</sub> = 150 V		1.0	4.0	nA
T <sub>K</sub> (I <sub>D</sub> )	Temperature coefficient	V <sub>R</sub> = 10 V; change of dark current		13		%/K
C	Capacitance	V <sub>R</sub> = 10 V; f = 10 kHz		20		pF
		V <sub>R</sub> = 150 V; f = 10 kHz		8		pF
	Responsivity	λ = 800 nm		0.61		A/W
		λ = 900 nm		0.69		A/W
t <sub>R</sub>	Rise time	V <sub>R</sub> = 150 V; λ = 905 nm; R <sub>L</sub> = 50 Ω		6		ns
	Shunt Resistance	V <sub>R</sub> = 10 mV	250	500		MΩ
	N.E.P.	V <sub>R</sub> = 150 V; λ = 905 nm		2.7 E-14		W/√Hz
V <sub>BR</sub>	Breakdown voltage	I <sub>R</sub> = 2 µA	300	500		V

European, International Sales:

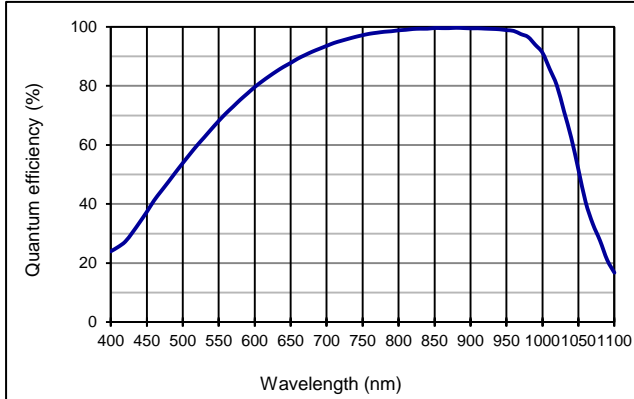
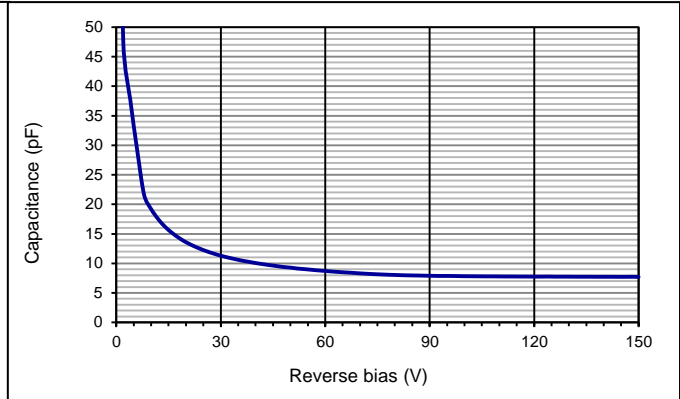
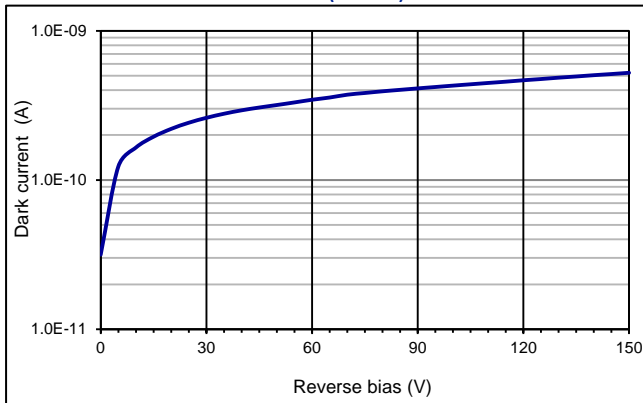
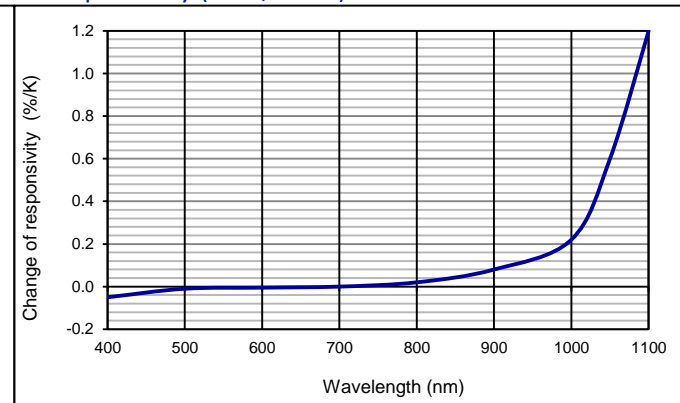


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**Quantum efficiency (23 °C)**

**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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