

### Features

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

### Description

Circular active area PIN photodiode with 10 mm<sup>2</sup> active area. Metal can type hermetic TO5 package with clear glass window.

### Application

- Precision photometry
- Bar code readers
- Medical equipment
- Pulsed light sensor

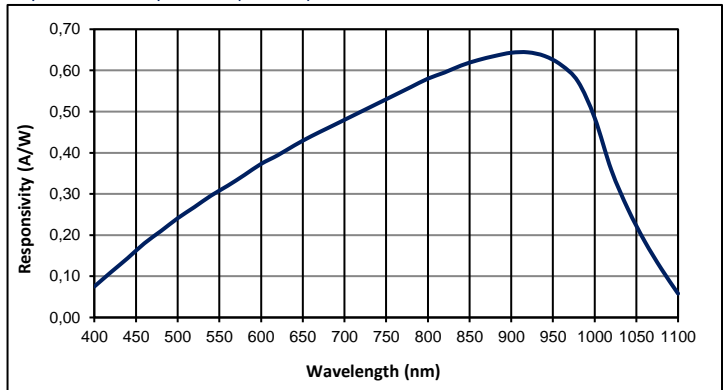
### RoHS

2011/65/EU

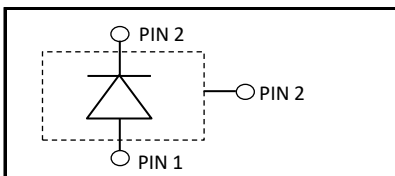
### Absolute maximum ratings

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		20	V
I <sub>PEAK</sub>	Peak DC current		10	mA

### Spectral response (23 °C)



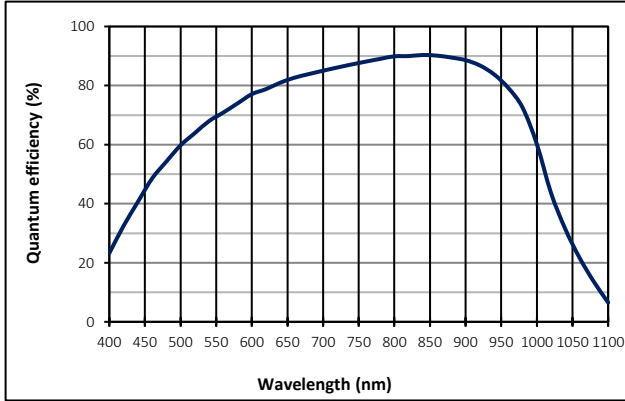
### Schematic



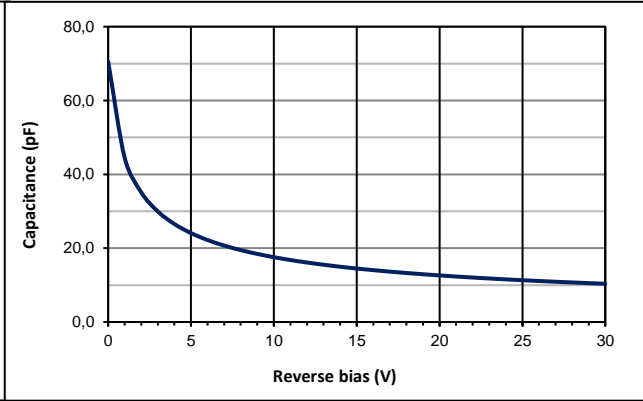
### Electro-optical characteristics @ 23 °C

Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		3570 diameter			μm
	Active area		10.0			mm <sup>2</sup>
I <sub>D</sub>	Dark current	V <sub>R</sub> = 10 V		0.2		nA
C	Capacitance	V <sub>R</sub> = 0 V		100		pF
		V <sub>R</sub> = 10 V		15		pF
	Responsivity	λ = 632 nm		0.4		A/W
		λ = 900 nm		0.64		A/W
t <sub>R</sub>	Rise time	V <sub>R</sub> = 0 V; λ = 850 nm; R <sub>L</sub> = 50 Ω		2000		ns
		V <sub>R</sub> = 10 V; λ = 850 nm; R <sub>L</sub> = 50 Ω		20		ns
	Shunt Resistance	V <sub>R</sub> = 10 mV		1500		MΩ
	N.E.P.	V <sub>R</sub> = 10 V; λ = 900 nm		1.3 E-14		W/√Hz
V <sub>BR</sub>	Breakdown voltage	I <sub>R</sub> = 2 μA	30			V

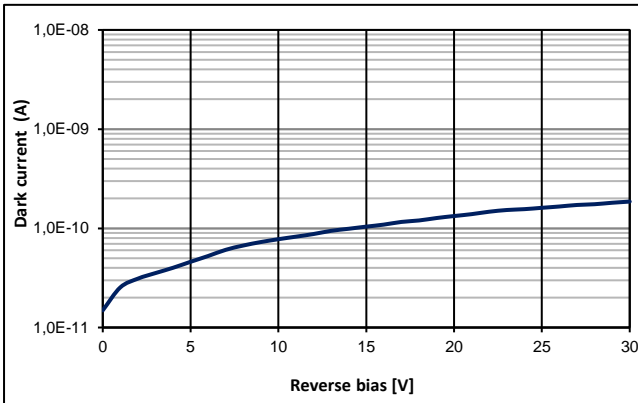
Quantum efficiency (23 °C)



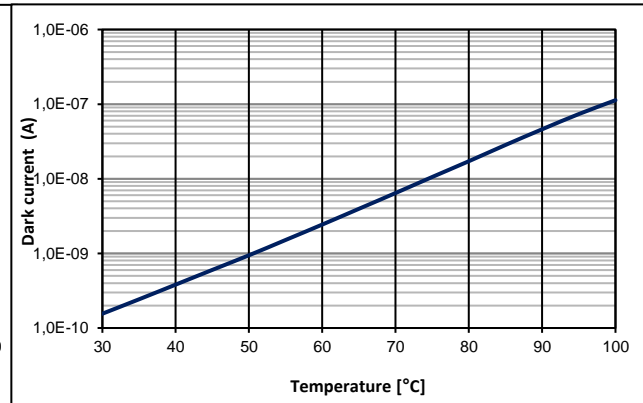
Capacitance as fct of reverse bias (23 °C)



Dark current as fct of bias (23 °C)



Dark current as fct of temperature ( $V_R = 10$  V)



**Package dimension:**

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

**Handling:**

Please refer to document "Instructions for handling and processing"