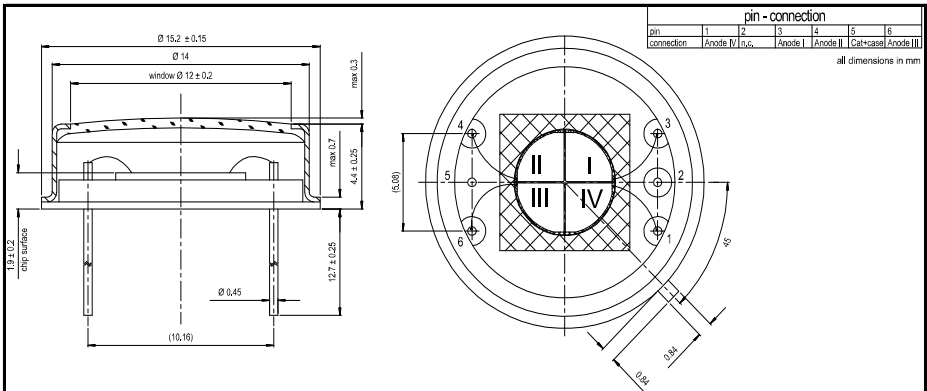
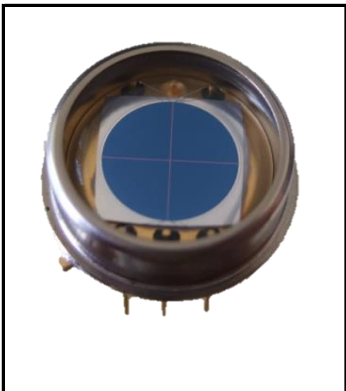




Features

- Quadrant detector
- 4 x 5.7 mm² active area
- Low dark current
- Fast rise time, low capacitance
- High QE at 1064 nm

Description

Circular active area quadrant PIN detector with 70 µm gaps, optimized for 1064 nm. Metal can type hermetic TO8S package with clear glass window.

Application

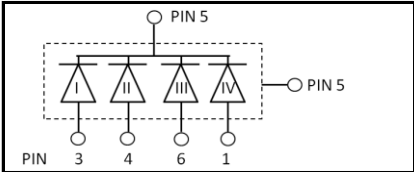
- 1064 nm laser detection
- High speed photometry
- NIR pulsed light sensor

RoHS
2011/65/EU

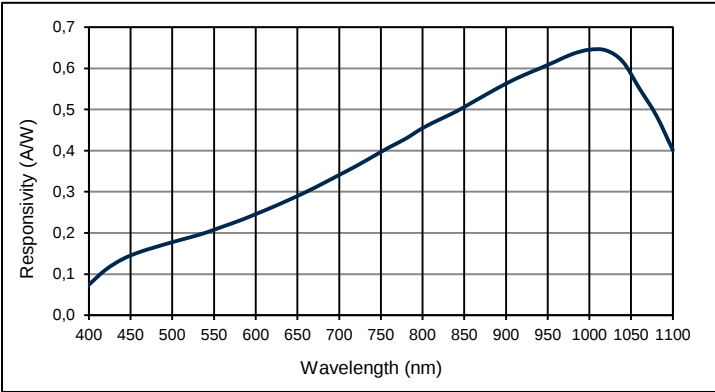
Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T _{STG}	Storage temp	-55	125	°C
T _{OP}	Operating temp	-40	85	°C
V _{OP}	Operating voltage		250	V
I _{PEAK}	Peak DC current		10	mA

Schematic



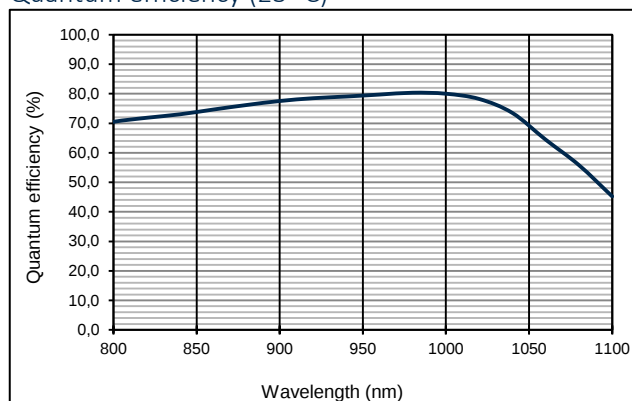
Spectral response (23 °C)



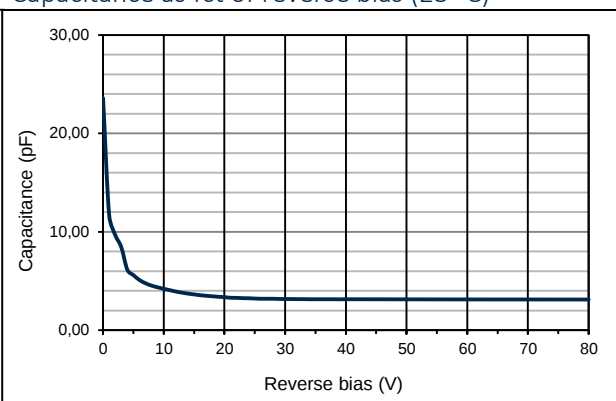
Electro-optical characteristics @ 23 °C

Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Number of elements		4 quadrants			
	Active area		diameter 5330 (total)			µm
	Active area	per element	5.67			mm ²
	Gap	between elements	70			µm
I _D	Dark current	V _R = 150 V; per element		1.5	3.5	nA
C	Capacitance	V _R = 150 V; per element		2	4	pF
	Responsivity	V _R = 150 V; λ = 1064 nm; R _L = 50 Ω	0.42	0.48	0.65	A/W
t _R	Rise time	V _R = 180 V; λ = 1064 nm; R _L = 50 Ω		12		ns
V _{BR}	Breakdown voltage	I _R = 2 µA	250			V
	Temperature coefficient	Change of I _{PH} with temperature		1.07		%/K
	Cross talk	V _R = 150 V; λ = 1064 nm; R _L = 50 Ω		0.5	2	%

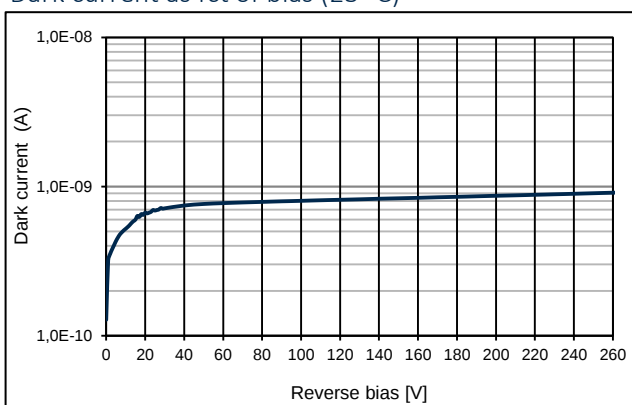
Quantum efficiency (23 °C)



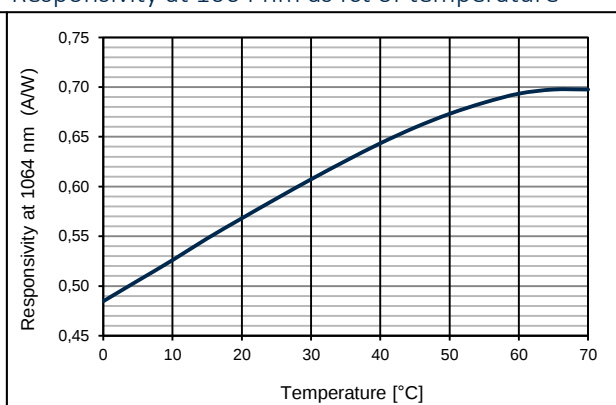
Capacitance as fct of reverse bias (23 °C)



Dark current as fct of bias (23 °C)



Responsivity at 1064 nm as fct of temperature



Package dimension:

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

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