

**Features**

- Quadrant detector
- 4 x 5.7 mm<sup>2</sup> 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

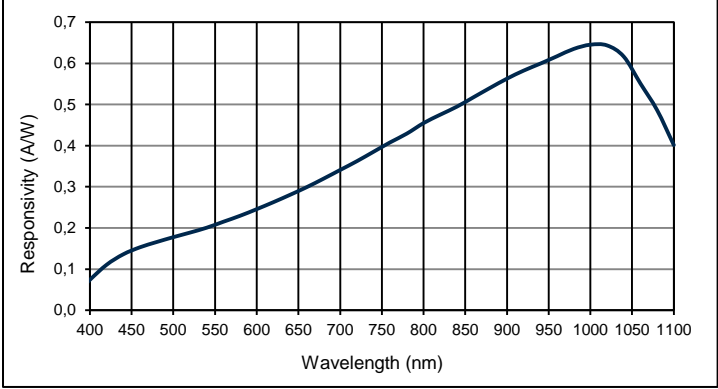
**RoHS**

2011/65/EU

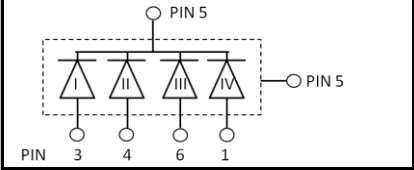
**Absolute maximum ratings**

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

**Spectral response (23 °C)**



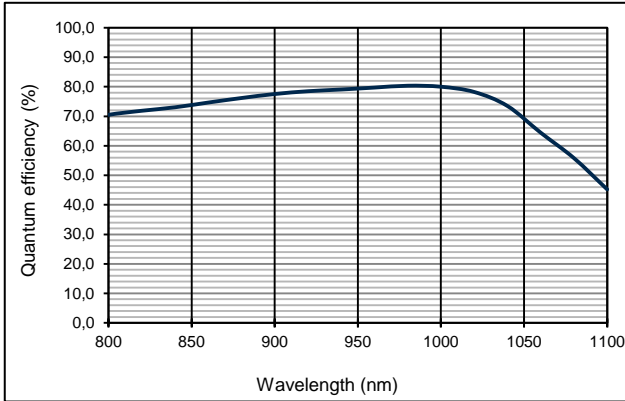
**Schematic**



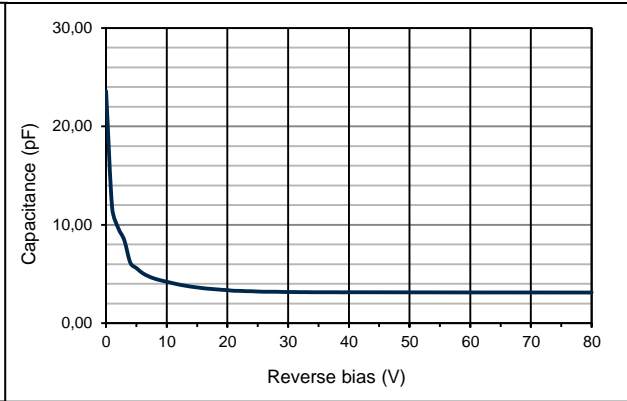
**Electro-optical characteristics @ 23 °C**

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

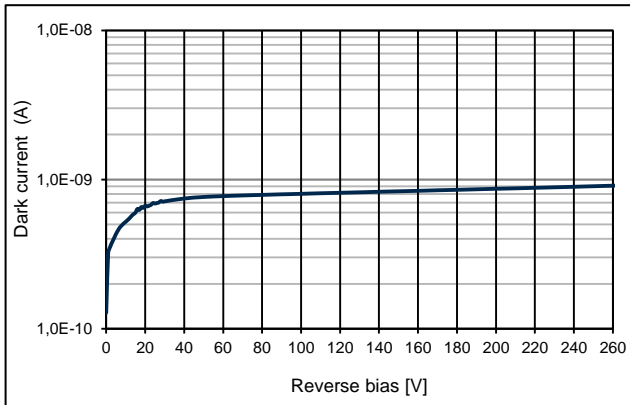
Quantum efficiency (23 °C)



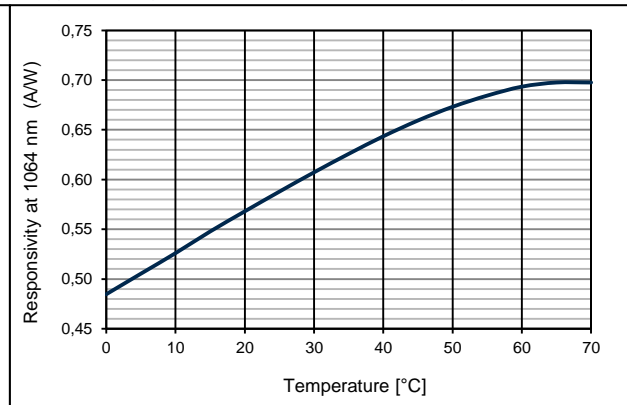
Capacitance as fct of reverse bias (23 °C)



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.