

Features

- Quadrant detector
- 4 x 11 mm² active area
- Low dark current
- Fast rise time, low capacitance
- High QE at 1064 nm

Description

Square active area quadrant PIN detector with 70 μm gaps, optimized for 1064 nm. Metal can type hermetic TO8S package with clear glass window. Isolated version available: #501275.

Application

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

RoHS

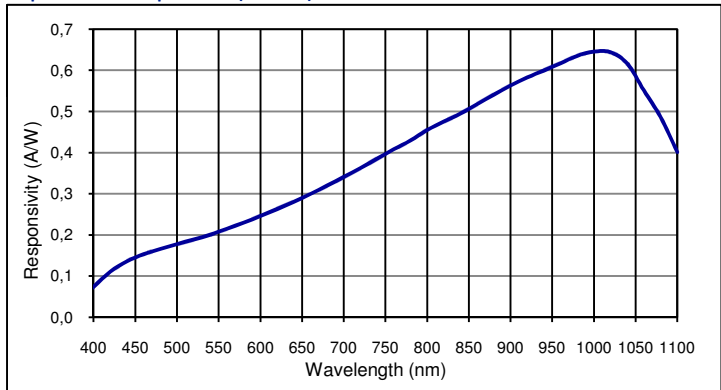
2002/95/EC



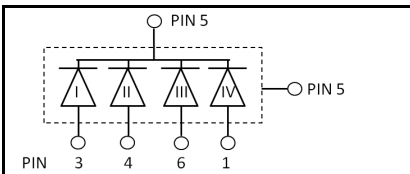
Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T _{STG}	Storage temp	-55	125	°C
T _{OP}	Operating temp	-40	85	°C
V _{OP}	Operating voltage		250	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
	Number of elements		4 quadrants			
	Active area		6690 x 6690 (total)			μm
	Active area	per element	10.96			mm ²
	Gap	between elements	70			μm
I _D	Dark current	V _R = 150 V, per element		8	15	nA
C	Capacitance	V _R = 150 V, per element		4	5	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	%

European, International Sales:



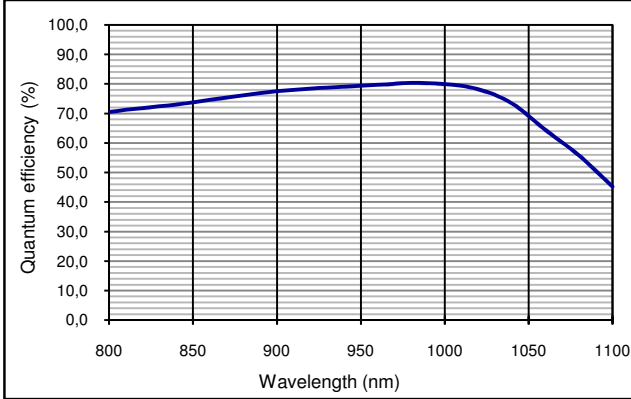
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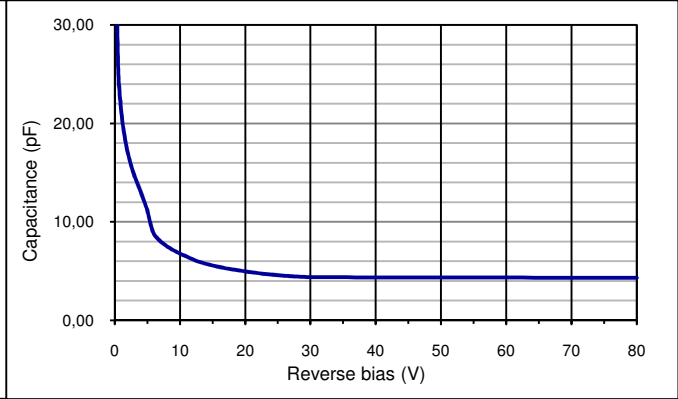


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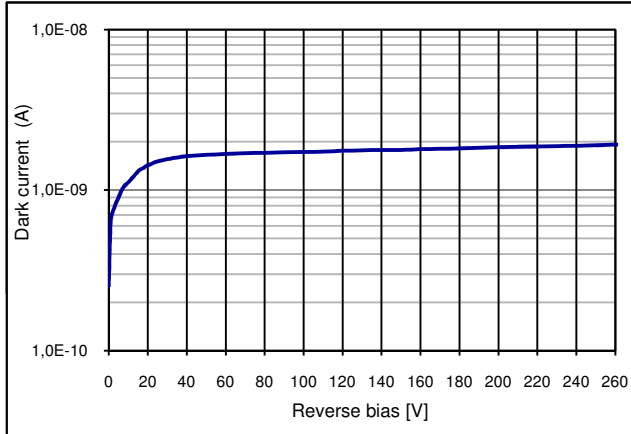
Quantum efficiency (23 °C)



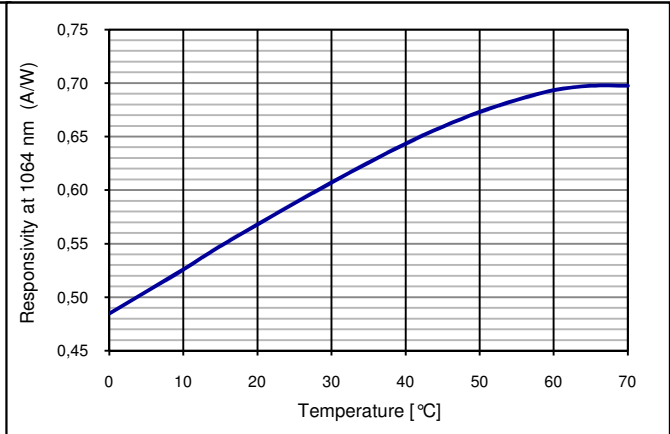
Capacitance as fct of reverse bias (23 °C)



Dark current as fct of bias (23 °C)



Responsivity 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.

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