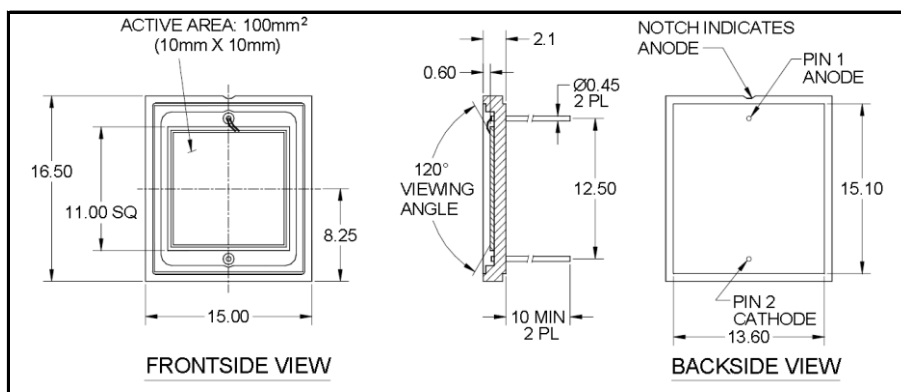
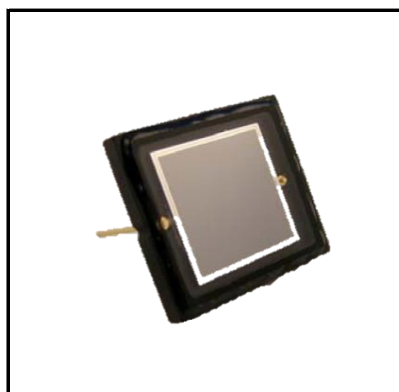




Features

- 100 mm² PIN detector
- Low dark current
- High shunt resistance
- High sensitivity

Description

Low dark current PIN photodiode with 100 mm² square active area. Non-hermetic ceramic carrier package with glass window. Epoxy or silicone potting on special request.

Application

- Precision photometry
- Analytical instruments
- Medical equipment
- Fluorescence detector

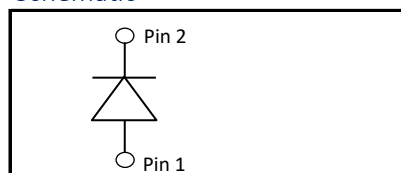
RoHS

2011/65/EU

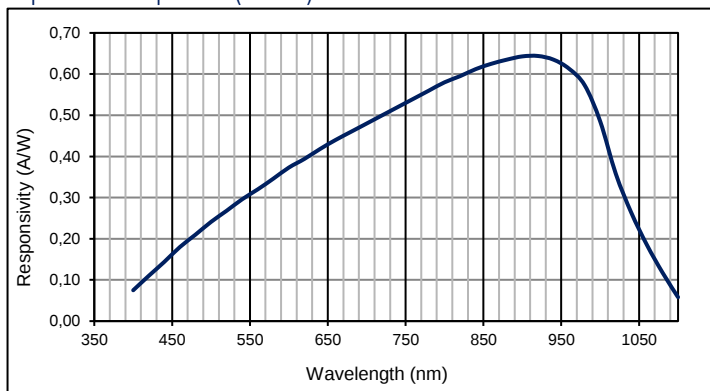
Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T_{STG}	Storage temp	-40	125	°C
T_{OP}	Operating temp	-40	100	°C
V_{max}	Max reverse voltage		50	V
I_{PEAK}	Peak DC current		10	mA

Schematic



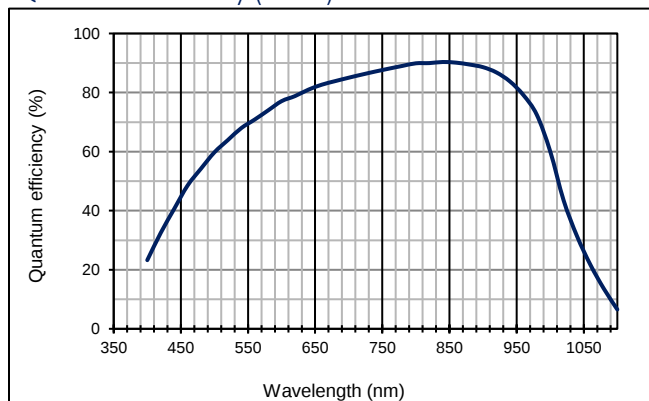
Spectral response (23 °C)



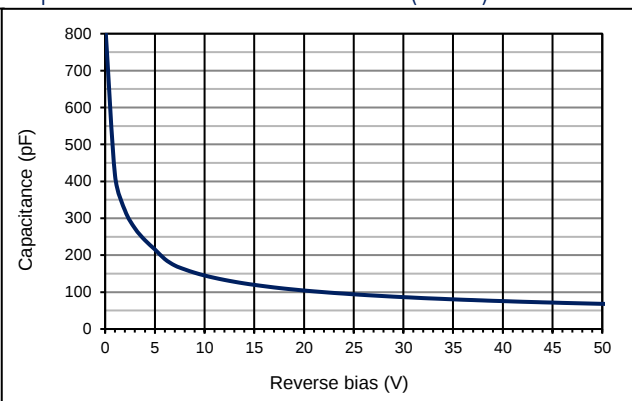
Electro-optical characteristics @ 23 °C

Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		10000 x 10000			μm
	Active area		100			mm ²
I_D	Dark current	$V_R = 10$ V		1	10	nA
C	Capacitance	$V_R = 0$ V		900		pF
		$V_R = 10$ V		160		pF
	Responsivity	$\lambda = 632$ nm		0.4		A/W
		$\lambda = 900$ nm		0.64		A/W
t_R	Rise time	$V_R = 0$ V; $\lambda = 850$ nm; $R_L = 50$ Ω		2000		ns
		$V_R = 10$ V; $\lambda = 850$ nm; $R_L = 50$ Ω		40		ns
		$V_R = 80$ V; $\lambda = 850$ nm; $R_L = 50$ Ω		10		ns
	Shunt Resistance	$V_R = 10$ mV		150		MΩ
	N.E.P.	$V_R = 10$ V; $\lambda = 900$ nm		2.8 E-14		W/√Hz
V_{BR}	Breakdown voltage	$I_R = 2$ μA	50			V

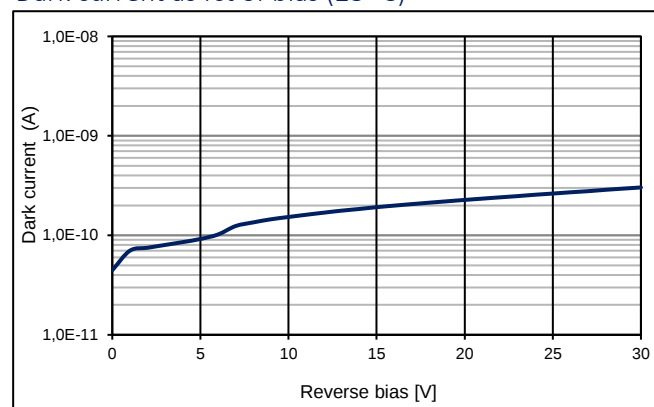
Quantum efficiency (23 °C)



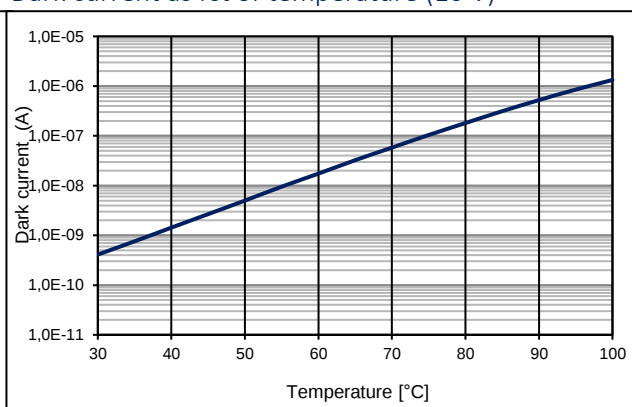
Capacitance as fct of reverse bias (23 °C)



Dark current as fct of bias (23 °C)



Dark current as fct of temperature (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"

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

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