
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

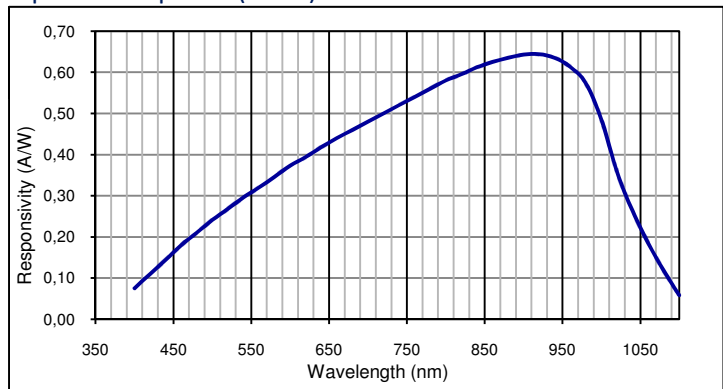
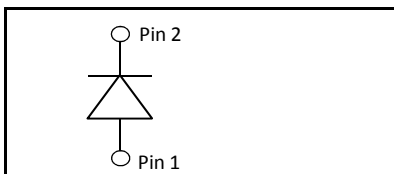
- Precision photometry
- Analytical instruments
- Medical equipment
- Fluorescence detector

RoHS

2002/95/EC


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

Spectral response (23 °C)

Schematic

Electro-optical characteristics @ 23 °C

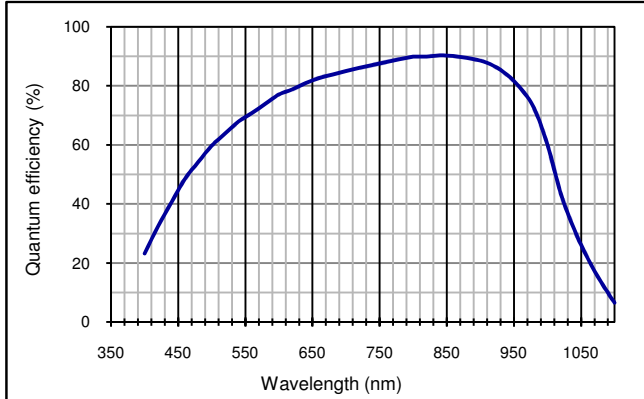
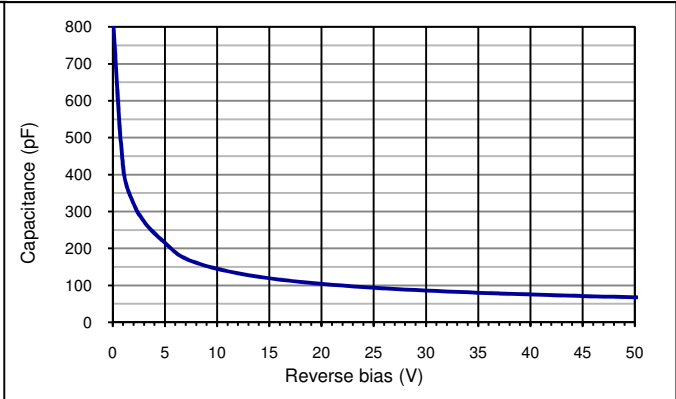
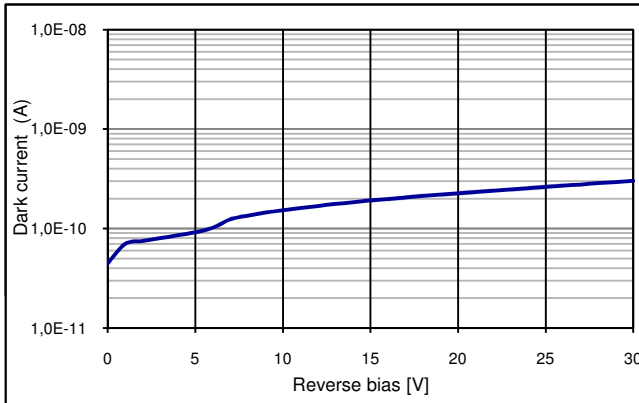
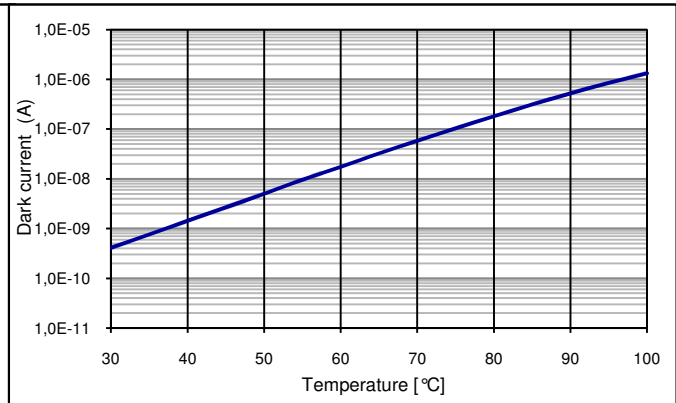
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		10000 x 10000			µm
	Active area		100			mm ²
I _D	Dark current	V _R = 10 V		1	10	nA
C	Capacitance	V _R = 0 V		900		pF
		V _R = 10 V		160		pF
	Responsivity	λ = 632 nm		0.4		A/W
		λ = 900 nm		0.64		A/W
t _R	Rise time	V _R = 0 V; λ = 850 nm; R _L = 50 Ω		2000		ns
		V _R = 10 V; λ = 850 nm; R _L = 50 Ω		40		ns
		V _R = 80 V; λ = 850 nm; R _L = 50 Ω		10		ns
	Shunt Resistance	V _R = 10 mV		150		MΩ
	N.E.P.	V _R = 10 V; λ = 900 nm		2.8 E-14		W/√Hz
V _{BR}	Breakdown voltage	I _R = 2 µA	50			V

European, International Sales:


First Sensor AG
 Peter-Behrens-Strasse 15
 12459 Berlin
 Germany
 Phone: +49-30-6399-2399
 Fax: +49-30-6399-23752
 E-Mail: sales.opto@first-sensor.com

USA:


Pacific Silicon Sensor, Inc.
 5700 Corsa Avenue #105
 Westlake Village
 CA 91362 USA
 Phone: +1-818-706-3400
 Fax: +1-818-889-7053
 E-Mail: sales@pacific-sensor.com

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.

European, International Sales:


First Sensor AG
 Peter-Behrens-Strasse 15
 12459 Berlin
 Germany
 Phone: +49-30-6399-2399
 Fax: +49-30-6399-23752
 E-Mail: sales.opto@first-sensor.com

USA:


Pacific Silicon Sensor, Inc.
 5700 Corsa Avenue #105
 Westlake Village
 CA 91362 USA
 Phone: +1-818-706-3400
 Fax: +1-818-889-7053
 E-Mail: sales@pacific-sensor.com