
**Features**

- 100 mm<sup>2</sup> PIN detector
- Low dark current
- High shunt resistance
- High sensitivity

**Description**

Low dark current PIN photodiode with 100 mm<sup>2</sup> square active area. Non-hermetic ceramic carrier package with silicon potting (reflow-solderable). Epoxy potting on special request.

**Application**

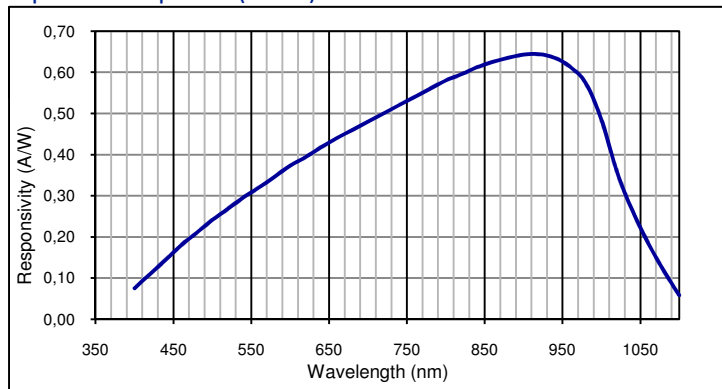
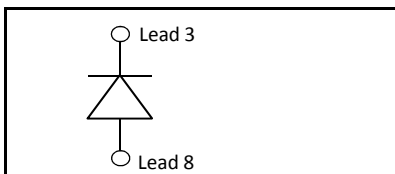
- Precision photometry
- Analytical instruments
- Medical equipment
- Fluorescence detector

**RoHS**

2002/95/EC


**Absolute maximum ratings**

Symbol	Parameter	Min	Max	Unit
T <sub>STG</sub>	Storage temp	-40	100	°C
T <sub>OP</sub>	Operating temp	-20	70	°C
V <sub>max</sub>	Max reverse voltage		50	V
I <sub>PEAK</sub>	Peak DC current		10	mA

**Spectral response (23 °C)**

**Schematic**

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

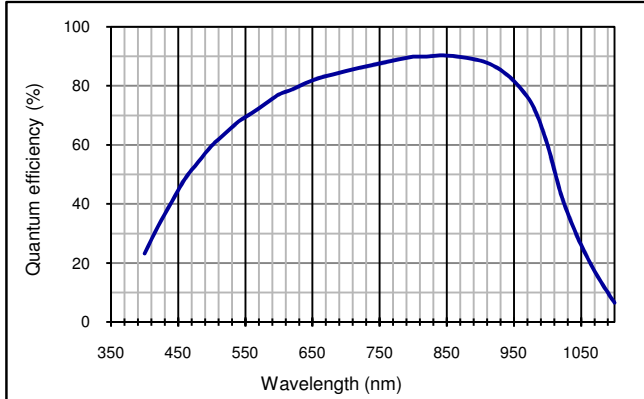
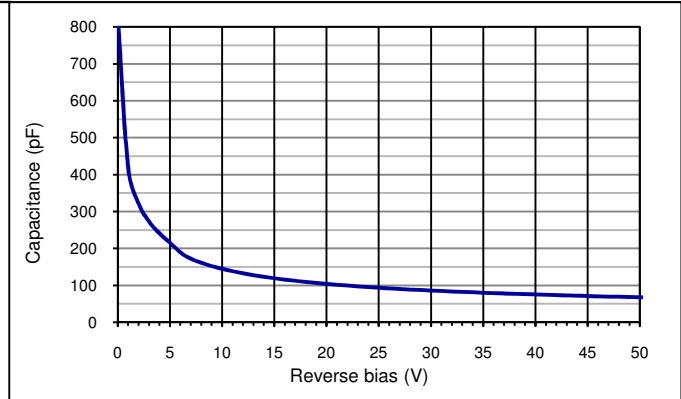
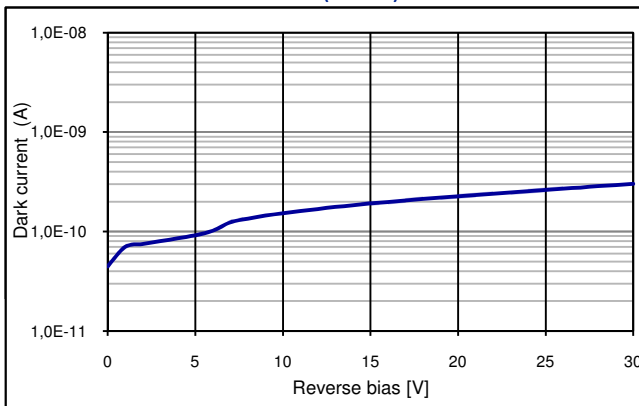
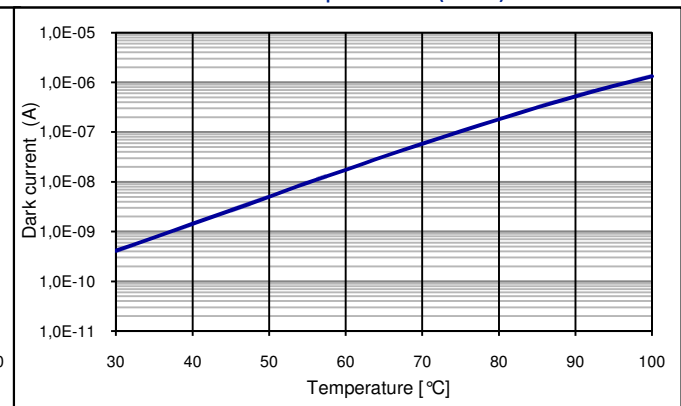
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		10000 x 10000			μm
	Active area		100			mm <sup>2</sup>
I <sub>D</sub>	Dark current	V <sub>R</sub> = 10 V		1	10	nA
C	Capacitance	V <sub>R</sub> = 0 V		900		pF
		V <sub>R</sub> = 10 V		160		pF
	Responsivity	λ = 632 nm		0.4		A/W
		λ = 900 nm		0.64		A/W
t <sub>R</sub>	Rise time	V <sub>R</sub> = 0 V; λ = 850 nm; R <sub>L</sub> = 50 Ω		2000		ns
		V <sub>R</sub> = 10 V; λ = 850 nm; R <sub>L</sub> = 50 Ω		40		ns
		V <sub>R</sub> = 80 V; λ = 850 nm; R <sub>L</sub> = 50 Ω		10		ns
	Shunt Resistance	V <sub>R</sub> = 10 mV		150		MΩ
	N.E.P.	V <sub>R</sub> = 10 V; λ = 900 nm		2,8 E-14		W/√Hz
V <sub>BR</sub>	Breakdown voltage	I <sub>R</sub> = 2 μA	50			V

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**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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