
Features

- 1000 µm x 1000 µm active area
- High sensitivity
- High shunt resistance
- UV/blue enhanced

Description

UV-blue enhanced square active area PIN photodiode with 1.0 mm² active area. Metal can type hermetic TO52 package with UV clear glass window cap.

Application

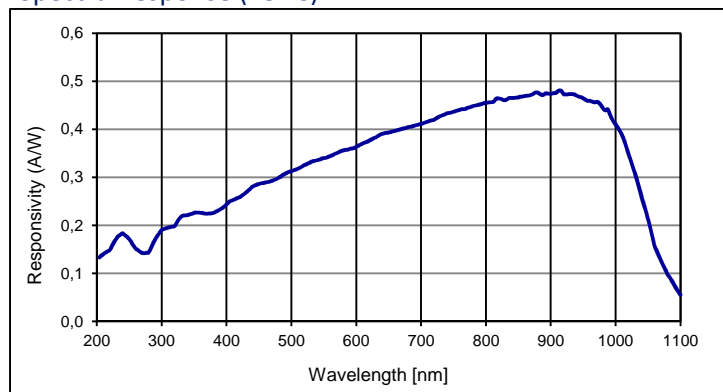
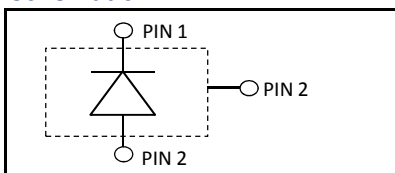
- UV exposure meters
- Pollution monitoring
- Medical equipment
- Fluorescence detector

RoHS

2002/95/EC


Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T _{STG}	Storage temp	-55	125	°C
T _{OP}	Operating temp	-40	100	°C
V _{max}	Max reverse voltage		20	V
I _{PEAK}	Peak DC current		10	mA

Spectral response (23 °C)

Schematic

Electro-optical characteristics @ 23 °C

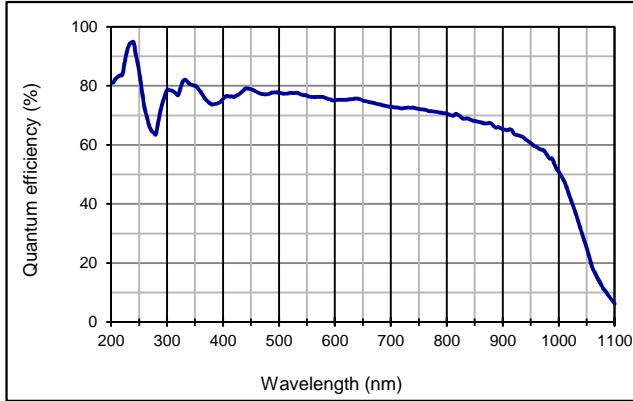
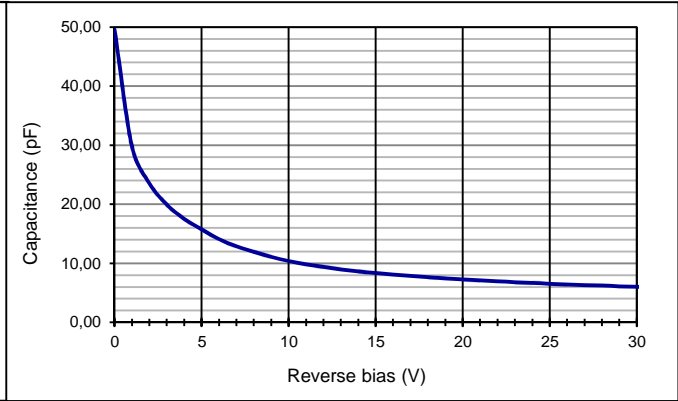
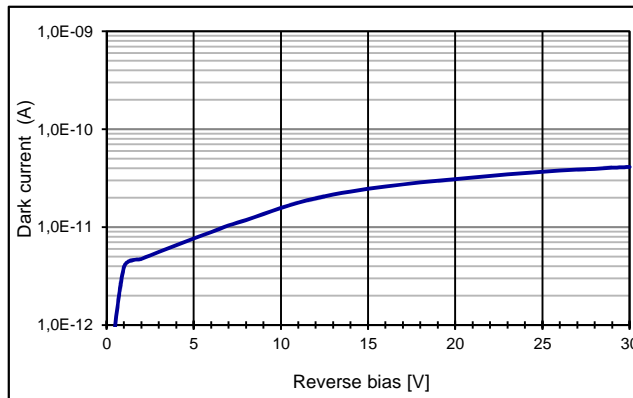
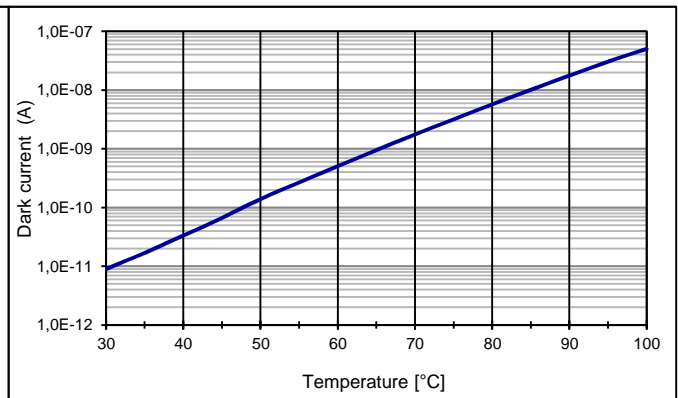
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		1000 x 1000			µm
	Active area		1.0			mm ²
I _D	Dark current	V _R = 5 V		0.01	0.05	nA
C	Capacitance	V _R = 0 V		50		pF
C	Capacitance	V _R = 5 V		16		pF
	Responsivity	λ = 450 nm		0.29		A/W
	Responsivity	λ = 340 nm		0.22		A/W
t _R	Rise time	V _R = 0 V; λ = 410 nm; R _L = 50 Ω		200		ns
	Rise time	V _R = 5 V; λ = 410 nm; R _L = 50 Ω		50		ns
V _{BR}	Breakdown voltage	I _R = 2 µA	20	30		V
	Shunt resistance	V _R = 10 mV	5000	10000		MΩ
	N.E.P.	V _R = 5 V; λ = 410 nm; R _L = 50 Ω		7.2 E-15		W/√Hz

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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 ($V_R = 5$ V)

Application hints:

Please refer to document "Instructions for handling and processing"

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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