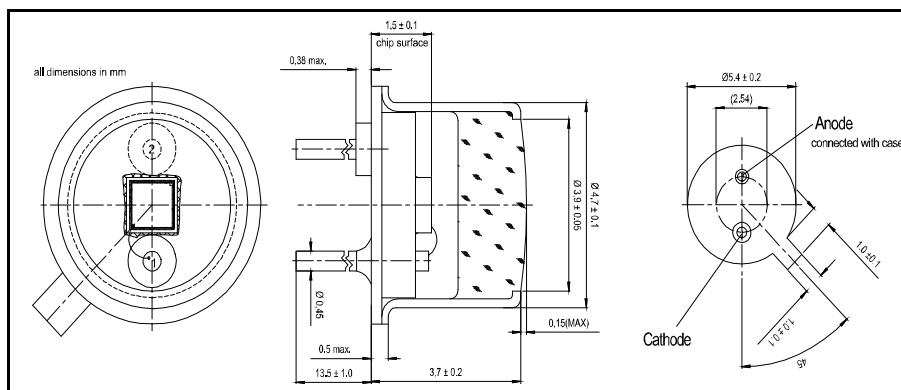




Features

- 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

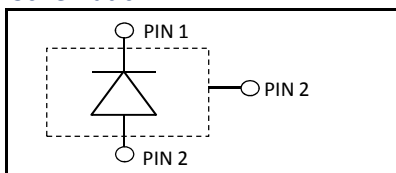
2002/95/EC



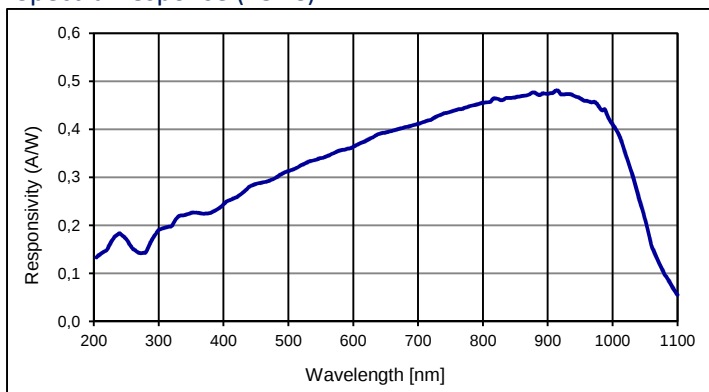
Absolute maximum ratings

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

Schematic



Spectral response (23 °C)



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	$V_R = 5 \text{ V}$		0.01	0.05	nA
C	Capacitance	$V_R = 0 \text{ V}$		50		pF
C	Capacitance	$V_R = 5 \text{ V}$		16		pF
	Responsivity	$\lambda = 450 \text{ nm}$		0.29		A/W
	Responsivity	$\lambda = 340 \text{ nm}$		0.22		A/W
t_R	Rise time	$V_R = 0 \text{ V}; \lambda = 410 \text{ nm}; R_L = 50 \Omega$		200		ns
	Rise time	$V_R = 5 \text{ V}; \lambda = 410 \text{ nm}; R_L = 50 \Omega$		50		ns
V_{BR}	Breakdown voltage	$I_R = 2 \mu\text{A}$	20	30		V
	Shunt resistance	$V_R = 10 \text{ mV}$	5000	10000		M Ω
	N.E.P.	$V_R = 5 \text{ V}; \lambda = 410 \text{ nm}; R_L = 50 \Omega$		7.2 E-15		W/ $\sqrt{\text{Hz}}$

European, International Sales:

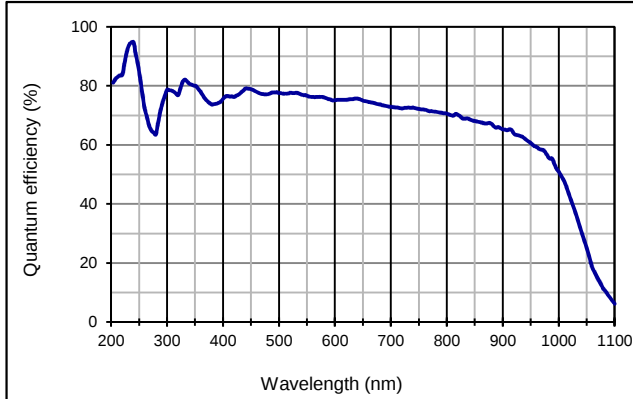
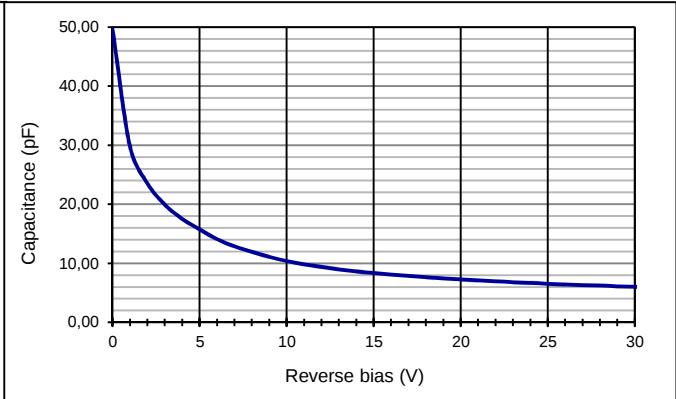
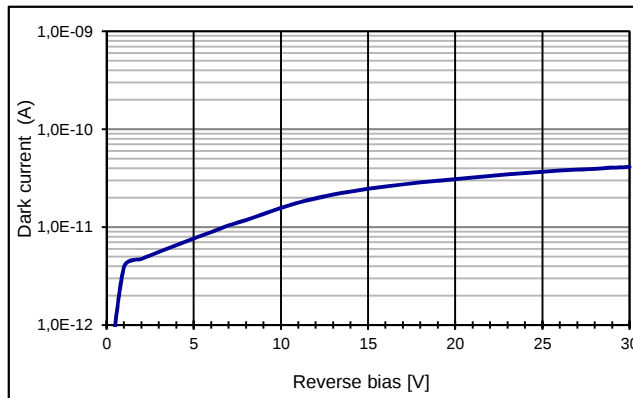
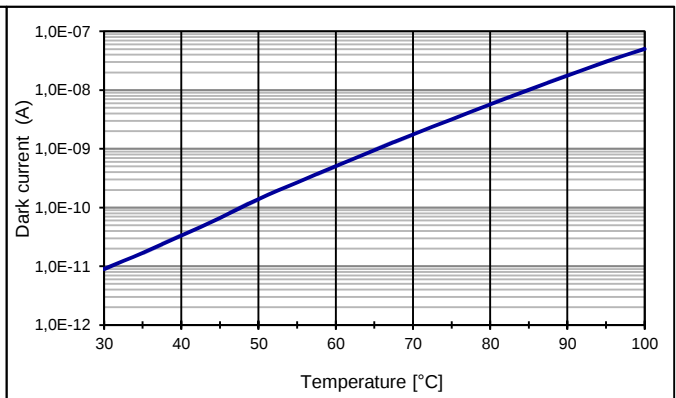


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Quantum efficiency (23 °C)

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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