
**Features**

- 1 mm<sup>2</sup> PIN detector
- High sensitivity
- High shunt resistance
- Blue-green enhanced

**Description**

Blue-green enhanced circular active area PIN photodiode with 1 mm<sup>2</sup> active area. Metal can type hermetic isolated TO52 package with clear glass window.

**Application**

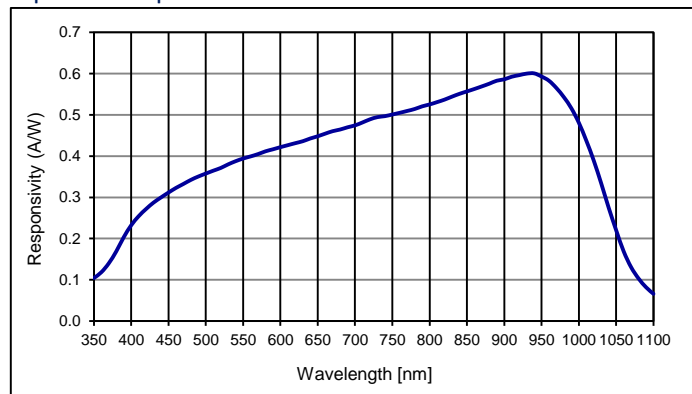
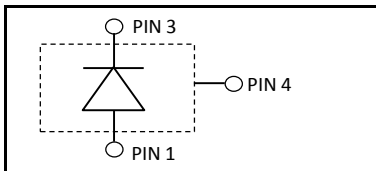
- Precision photometry
- Analytical instruments
- Medical equipment
- Fluorescence detector

**RoHS**

2002/95/EC


**Absolute maximum ratings**

Symbol	Parameter	Min	Max	Unit
T <sub>STG</sub>	Storage temp	-55	125	°C
T <sub>OP</sub>	Operating temp	-40	100	°C
V <sub>max</sub>	Max reverse voltage		30	V
I <sub>PEAK</sub>	Peak DC current		10	mA

**Spectral response**

**Schematic #501429**

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

Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		1000 x 1000			μm
	Active area		1.0			mm <sup>2</sup>
I <sub>D</sub>	Dark current	V <sub>R</sub> = 5 V		0.05		nA
C	Capacitance	V <sub>R</sub> = 0 V		20		pF
		V <sub>R</sub> = 5 V		5		pF
	Responsivity	λ = 410 nm		0.22		A/W
		λ = 550 nm		0.37		A/W
t <sub>R</sub>	Rise time	V <sub>R</sub> = 0 V; λ = 410 nm; R <sub>L</sub> = 50 Ω		30		ns
		V <sub>R</sub> = 5 V; λ = 410 nm; R <sub>L</sub> = 50 Ω		10		ns
	Shunt Resistance	V <sub>R</sub> = 5 mV		1000		MΩ
	N.E.P.	V <sub>R</sub> = 5 V; λ = 410 nm		1.8 E-14		W/√Hz
V <sub>BR</sub>	Breakdown voltage	I <sub>R</sub> = 2 μA	30	50		V

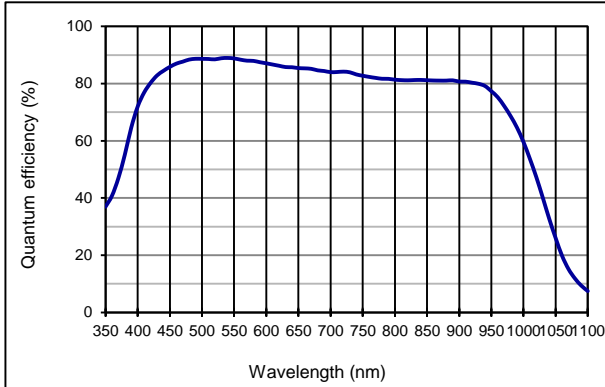
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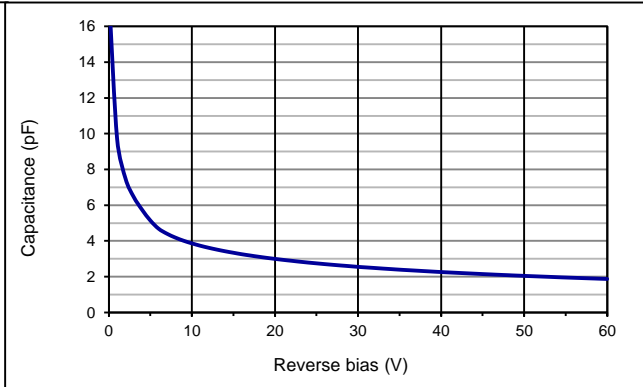
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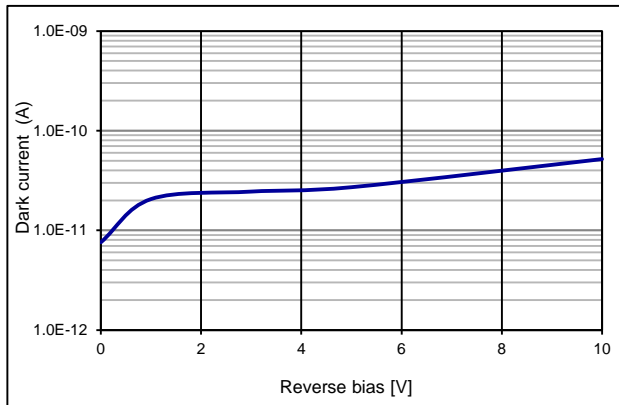
Quantum efficiency (23 °C)

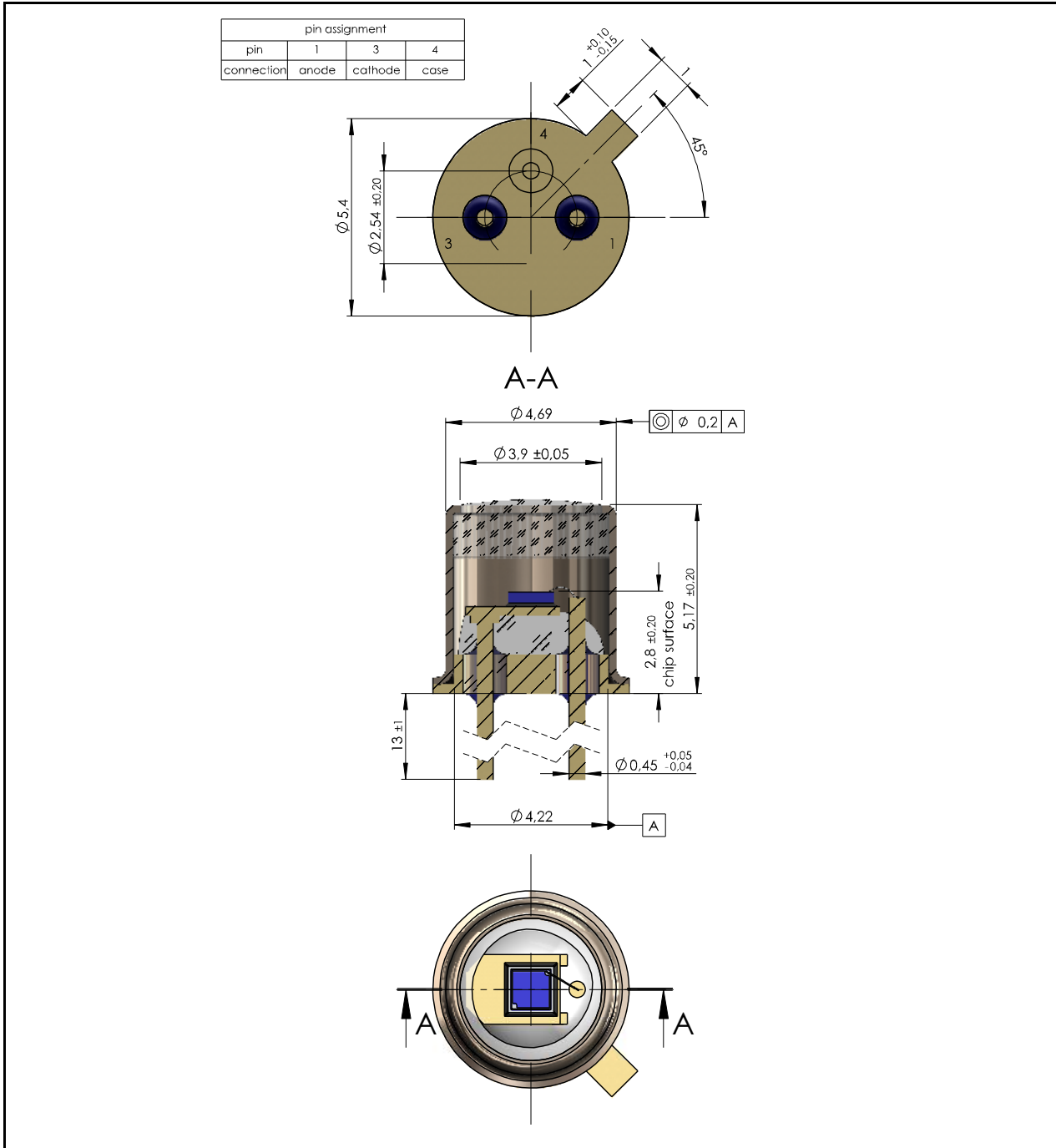


Capacitance as fct of reverse bias (23 °C)



Dark current as fct of bias (23 °C)



**Order number 501429, Package: TO52S1**

**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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