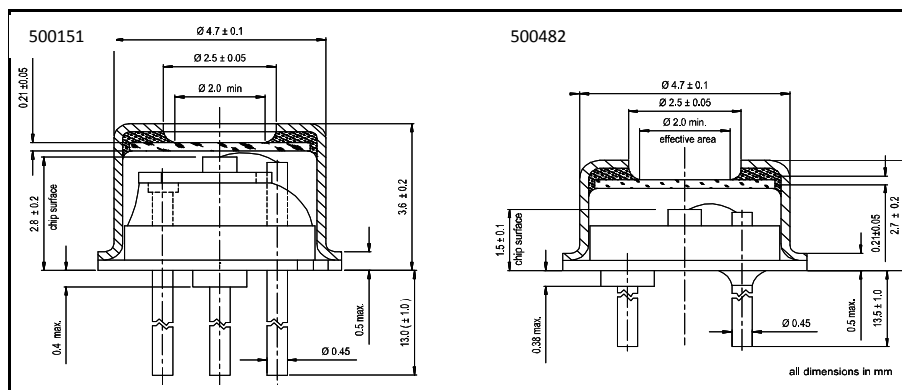
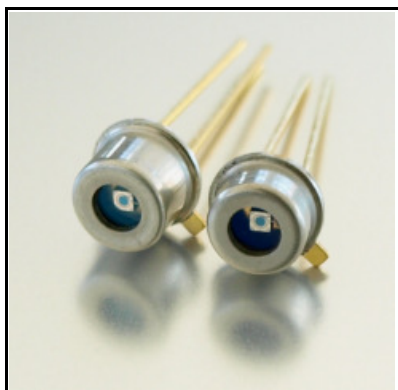




Features

- 1 mm² PIN detector
- High sensitivity
- High shunt resistance
- Low dark current

Description

Low dark current circular active area PIN photodiode with 1 mm² active area. Metal can type hermetic TO52 package with clear glass window.

Application

- Precision photometry
- Analytical instruments
- Medical equipment
- Pulsed light detector

RoHS

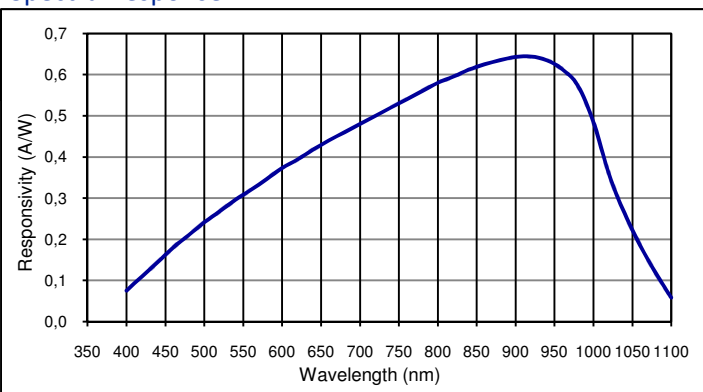
2002/95/EC



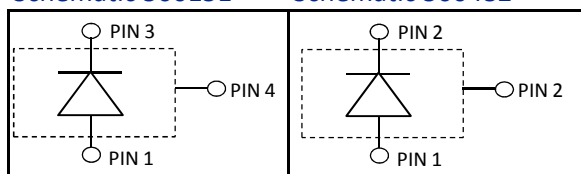
Absolute maximum ratings

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

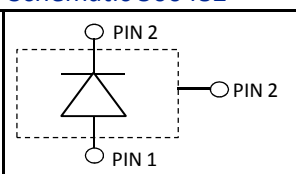
Spectral response



Schematic 500151



Schematic 500482



Electro-optical characteristics @ 23 °C

Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		diameter 1130			µm
	Active area		1			mm ²
I _D	Dark current	V _R = 10 V		0.05		nA
C	Capacitance	V _R = 0 V		20		pF
		V _R = 10 V		3		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		10		ns
		V _R = 80 V; λ = 850 nm; R _L = 50 Ω		5		ns
	Shunt Resistance	V _R = 5 mV	1000	2000		MΩ
	N.E.P.	V _R = 10 V; λ = 900 nm		6.3 E-15		W/√Hz
V _{BR}	Breakdown voltage	I _R = 2 µA	30	100		V

European, International Sales:



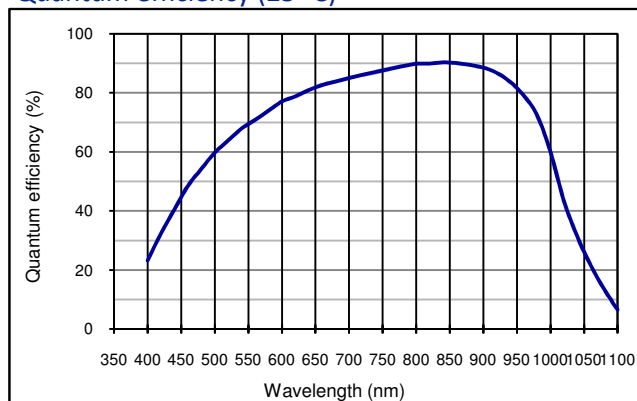
First Sensor AG
Peter-Behrens-Strasse 15
12459 Berlin
Germany
T +49 30 6399 2399
F +49 30 639923-752
sales.opto@first-sensor.com

USA:

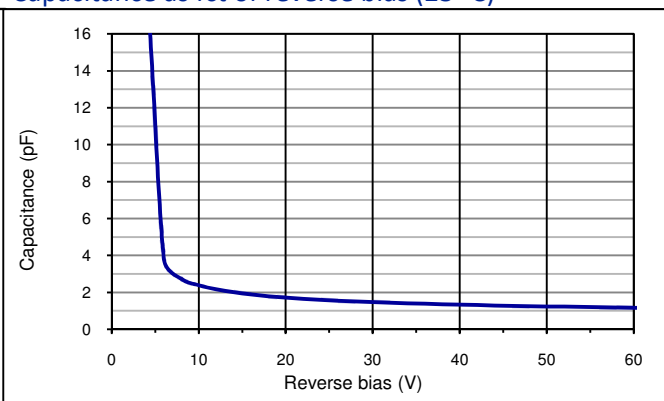


First Sensor Inc.
5700 Corsa Avenue #105
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CA 91362 USA
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sales.us@first-sensor.com

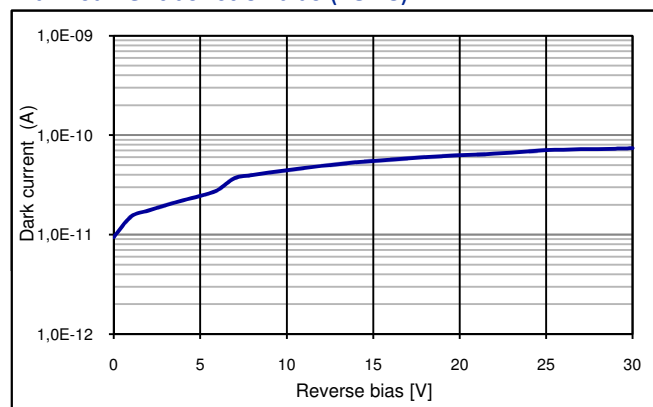
Quantum efficiency (23 °C)

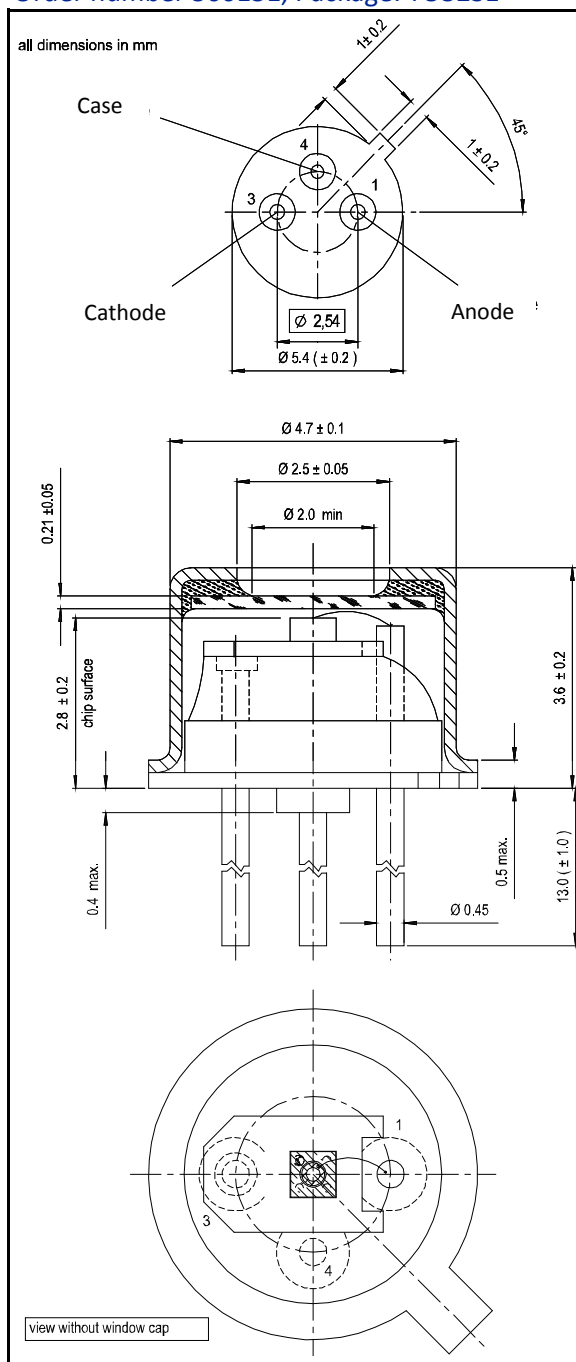
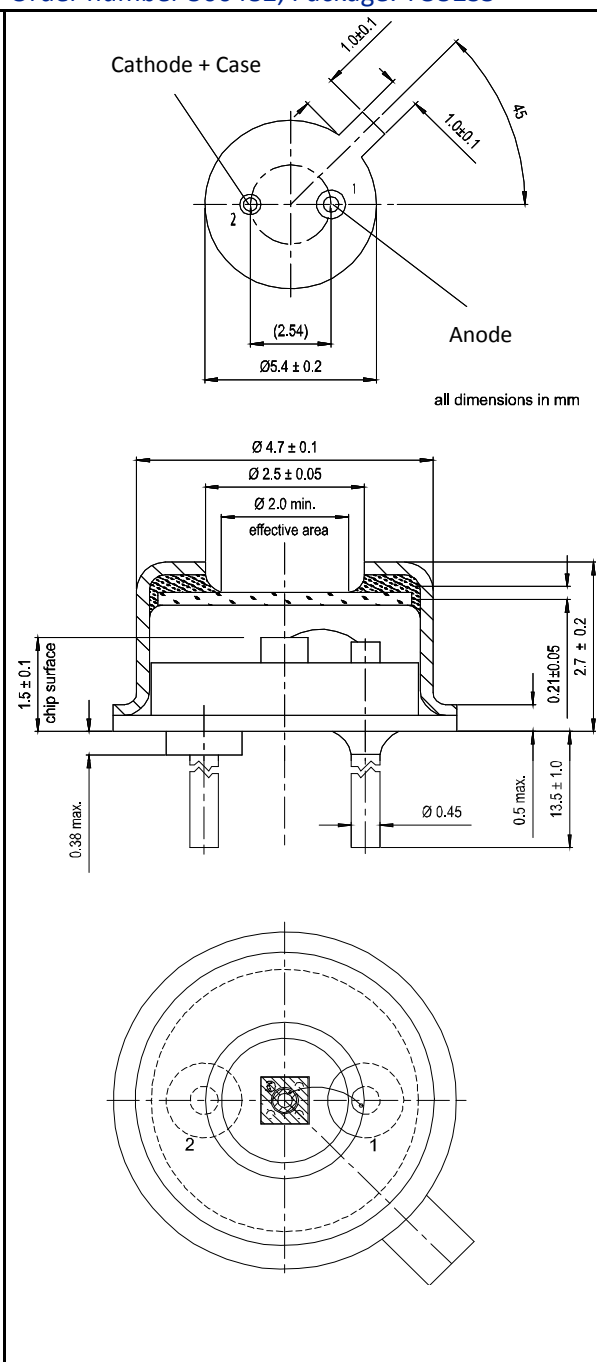


Capacitance as fct of reverse bias (23 °C)



Dark current as fct of bias (23 °C)



Order number 500151, Package: TO52S1

Order number 500482, Package: TO52S3

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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Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

First Sensor:

[PC1-6-TO52S3](#)