
Features

- 1 mm² PIN detector
- High sensitivity
- High shunt resistance
- Blue-green enhanced

Description

Blue-green enhanced circular active area PIN photodiode with 1 mm² active area. Ceramic carrier type non hermetic SMD package with clear glass window (501430) or silicone potting (on request). Reflow

Application

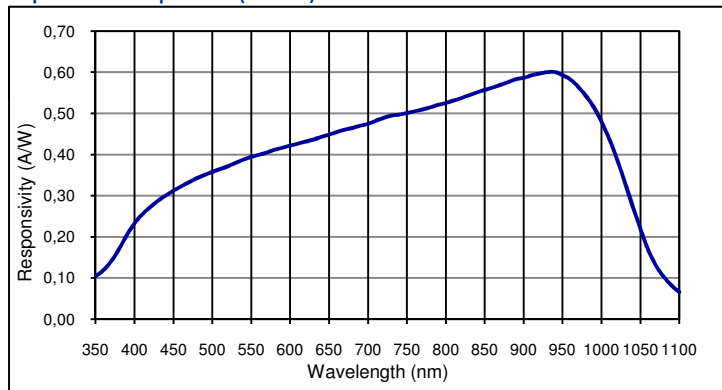
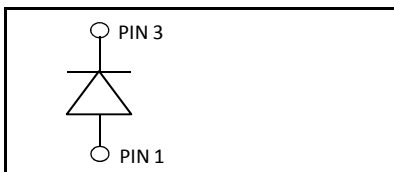
- Precision photometry
- Analytical instruments
- Medical equipment
- Fluorescence detector

RoHS

2002/95/EC


Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T _{STG}	Storage temp	-40	100	°C
T _{OP}	Operating temp	-20	70	°C
V _{max}	Max reverse voltage		30	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		0.05		nA
C	Capacitance	V _R = 0 V		20		pF
		V _R = 5 V		5		pF
	Responsivity	λ = 410 nm		0.22		A/W
		λ = 550 nm		0.37		A/W
t _R	Rise time	V _R = 0 V; λ = 410 nm; R _L = 50 Ω		30		ns
		V _R = 5 V; λ = 410 nm; R _L = 50 Ω		10		ns
	Shunt Resistance	V _R = 5 mV		1000		MΩ
	N.E.P.	V _R = 5 V; λ = 410 nm		1.8 E-14		W/√Hz
V _{BR}	Breakdown voltage	I _R = 2 µA	30	50		V

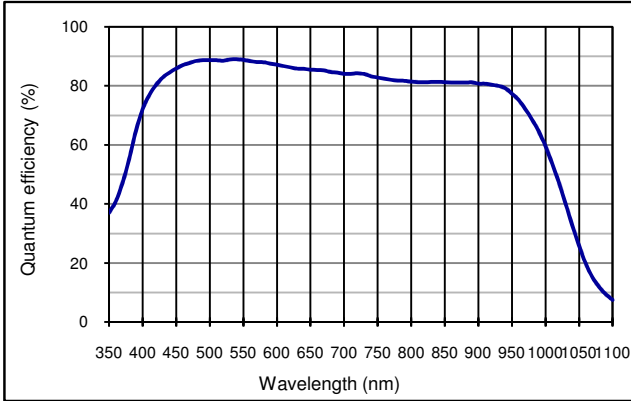
European, International Sales:


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

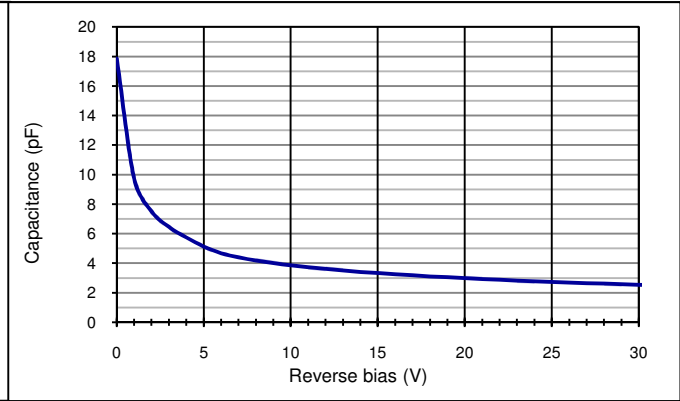
USA:


First Sensor Inc.
 5700 Corsa Avenue #105
 Westlake Village
 CA 91362 USA
 T +1 818 706 3400
 F +1 818 889 7053
 sales.us@first-sensor.com

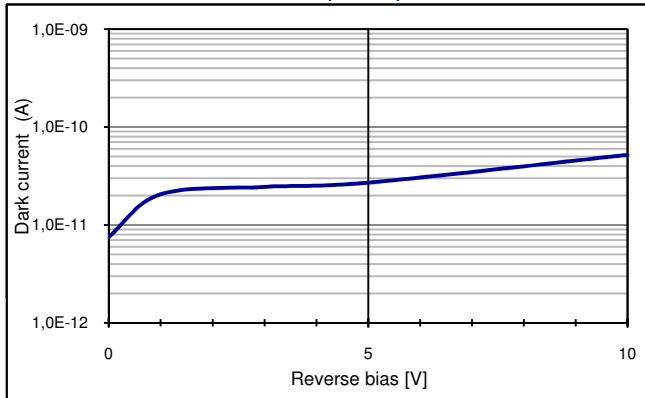
Quantum efficiency (23 °C)



Capacitance as fct of reverse bias (23 °C)



Dark current as fct of bias (23 °C)



Application hints:

Please refer to document "Instructions for handling and processing"

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:

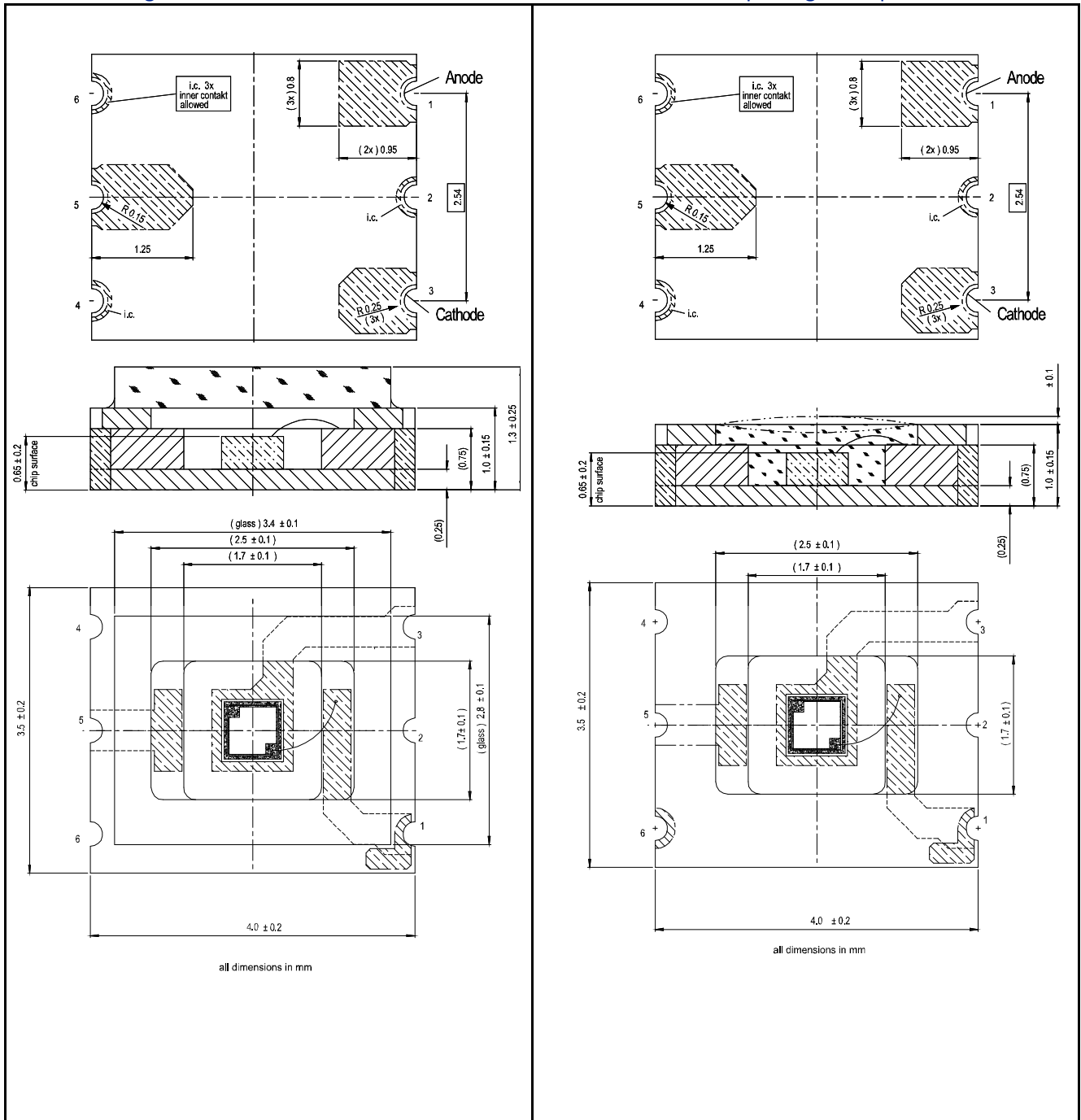


First Sensor Inc.
 5700 Corsa Avenue #105
 Westlake Village
 CA 91362 USA
 T +1 818 706 3400
 F +1 818 889 7053
 sales.us@first-sensor.com

Technical Drawing, Package: LCC6.1

LCC6.1G with glass cover # 501430

LCC6.1S with silicone potting on request



European, International Sales:

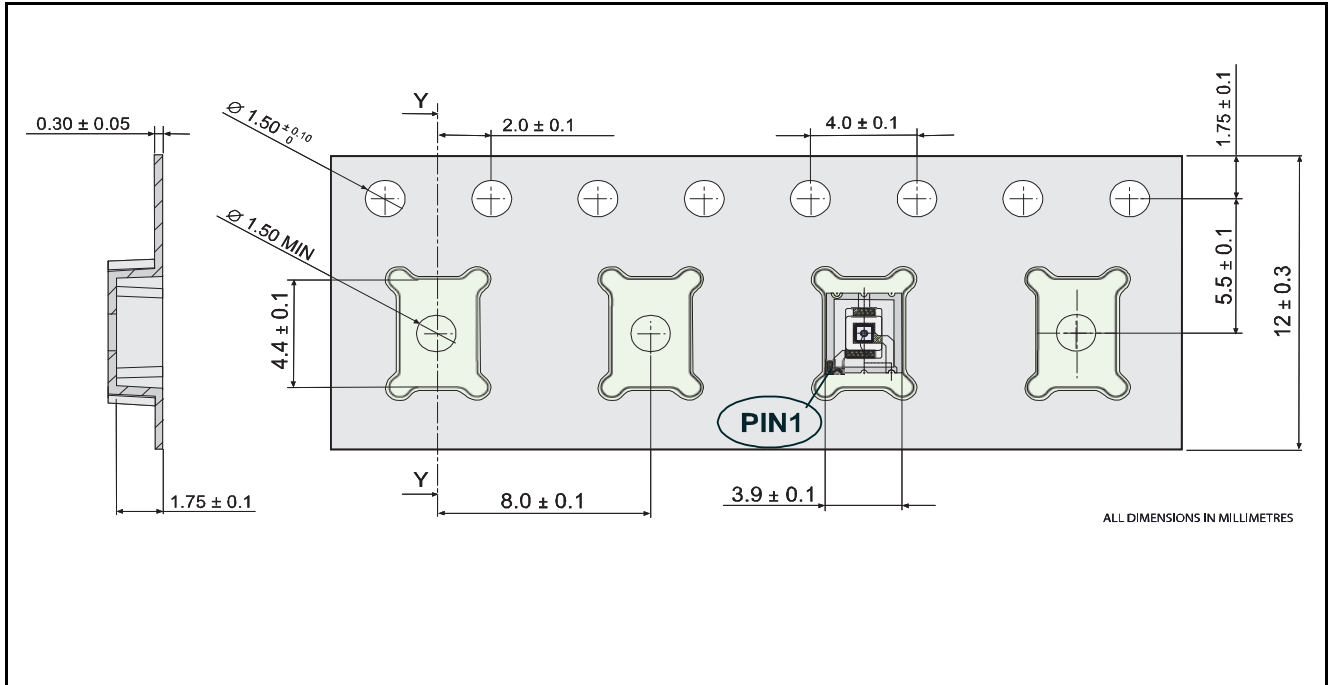
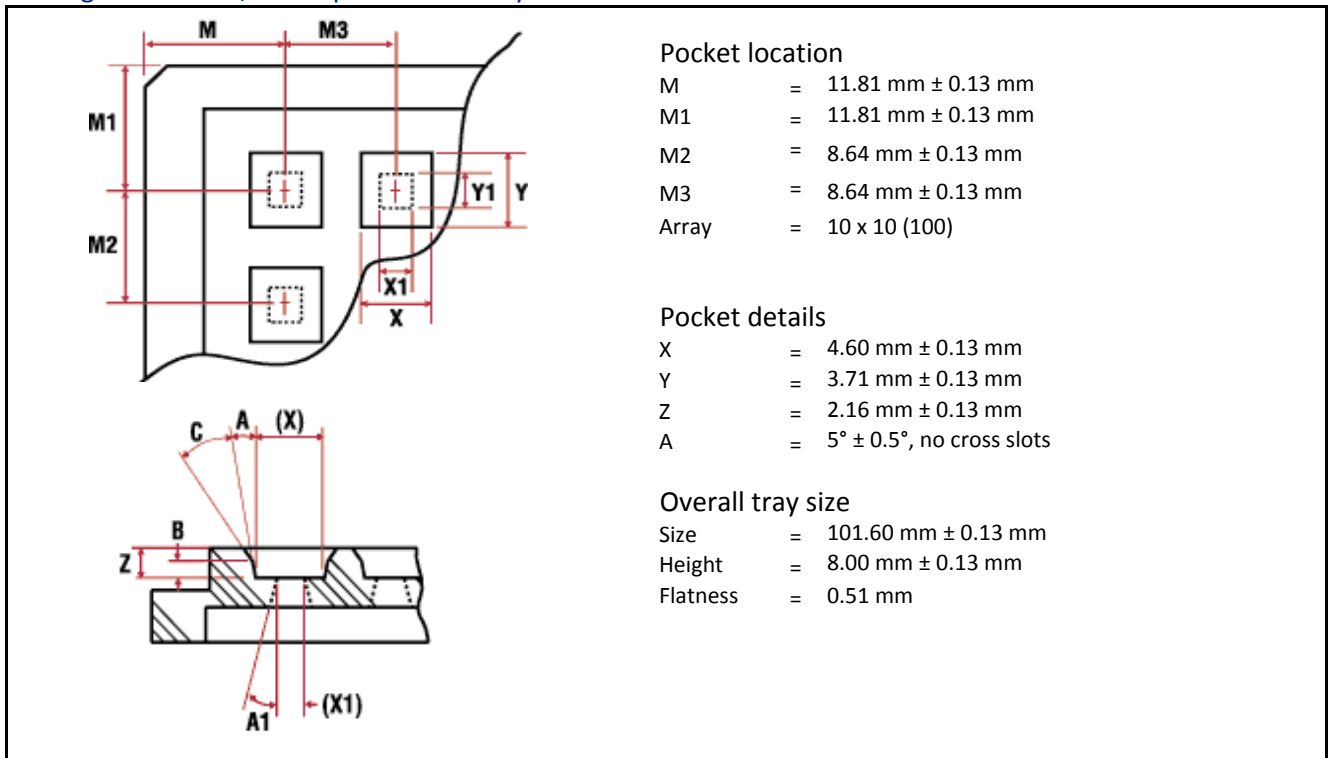


First Sensor AG
 Peter-Behrens-Strasse 15
 12459 Berlin
 Germany
 T +49 30 6399 2399
 F +49 30 639923-752
 sales.opto@first-sensor.com

USA:



First Sensor Inc.
 5700 Corsa Avenue #105
 Westlake Village
 CA 91362 USA
 T +1 818 706 3400
 F +1 818 889 7053
 sales.us@first-sensor.com

Package dimension, large quantities on reel

Package dimension, small quantities in trays


Disclaimer: Due to our strive for continuous improvement, specifications are subject to change within our PCN policy according to JESD46C.

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
 Westlake Village
 CA 91362 USA
 T +1 818 706 3400
 F +1 818 889 7053
 sales.us@first-sensor.com