

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. Ceramic carrier type non hermetic SMD package with quartz glass window. Reflow solderable.

Application

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

RoHS

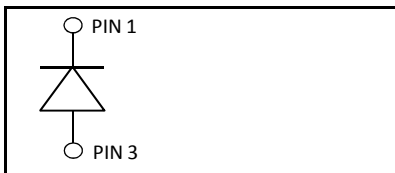
2002/95/EC



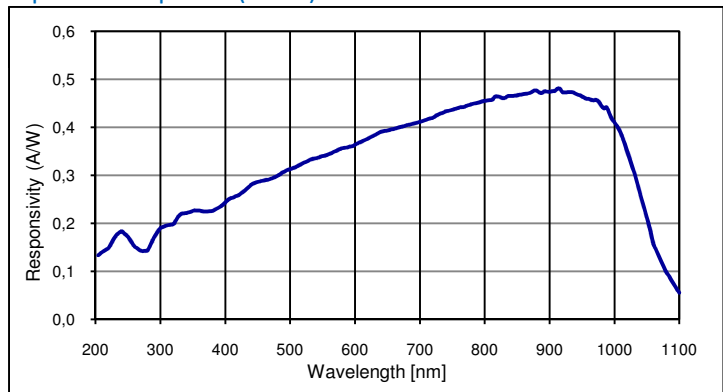
Absolute maximum ratings

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 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 = 850 nm; R _L = 50 Ω		5 E-15		W/√Hz

European, International Sales:



International AG

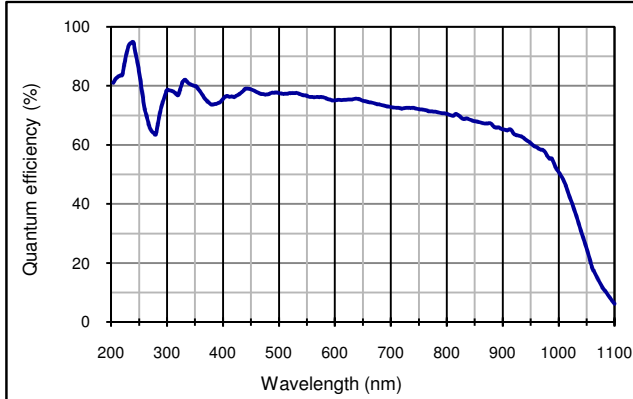
Silicon Sensor International AG
 Peter-Behrens-Strasse 15
 12459 Berlin
 Germany
 Phone: +49-30-6399-2399
 Fax: +49-30-6399-23752
 E-Mail: sales@silicon-sensor.com

USA:

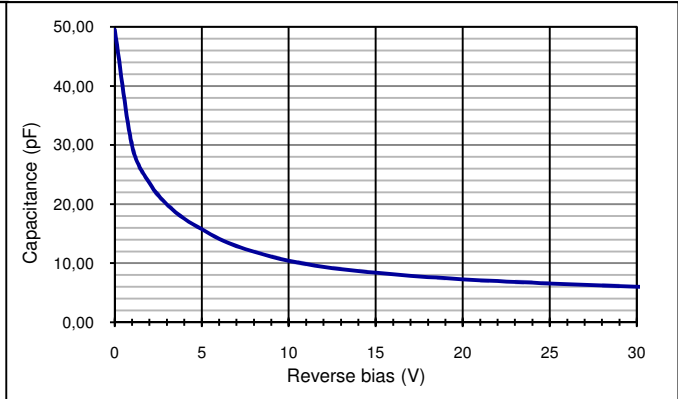


Pacific Silicon Sensor, Inc.
 5700 Corsa Avenue #105
 Westlake Village
 CA 91362 USA
 Phone: +1-818-706-3400
 Fax: +1-818-889-7053
 E-Mail: sales@pacific-sensor.com

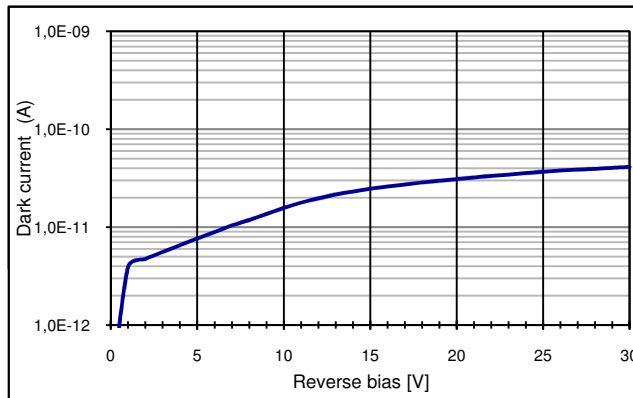
Quantum efficiency (23 °C)



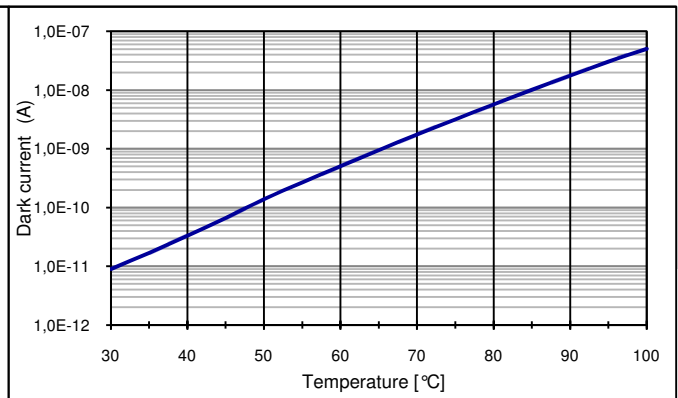
Capacitance as fct of reverse bias (23 °C)



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)

European, International Sales:



International AG

Silicon Sensor International AG
Peter-Behrens-Strasse 15
12459 Berlin
Germany
Phone: +49-30-6399-2399
Fax: +49-30-6399-23752
E-Mail: sales@silicon-sensor.com

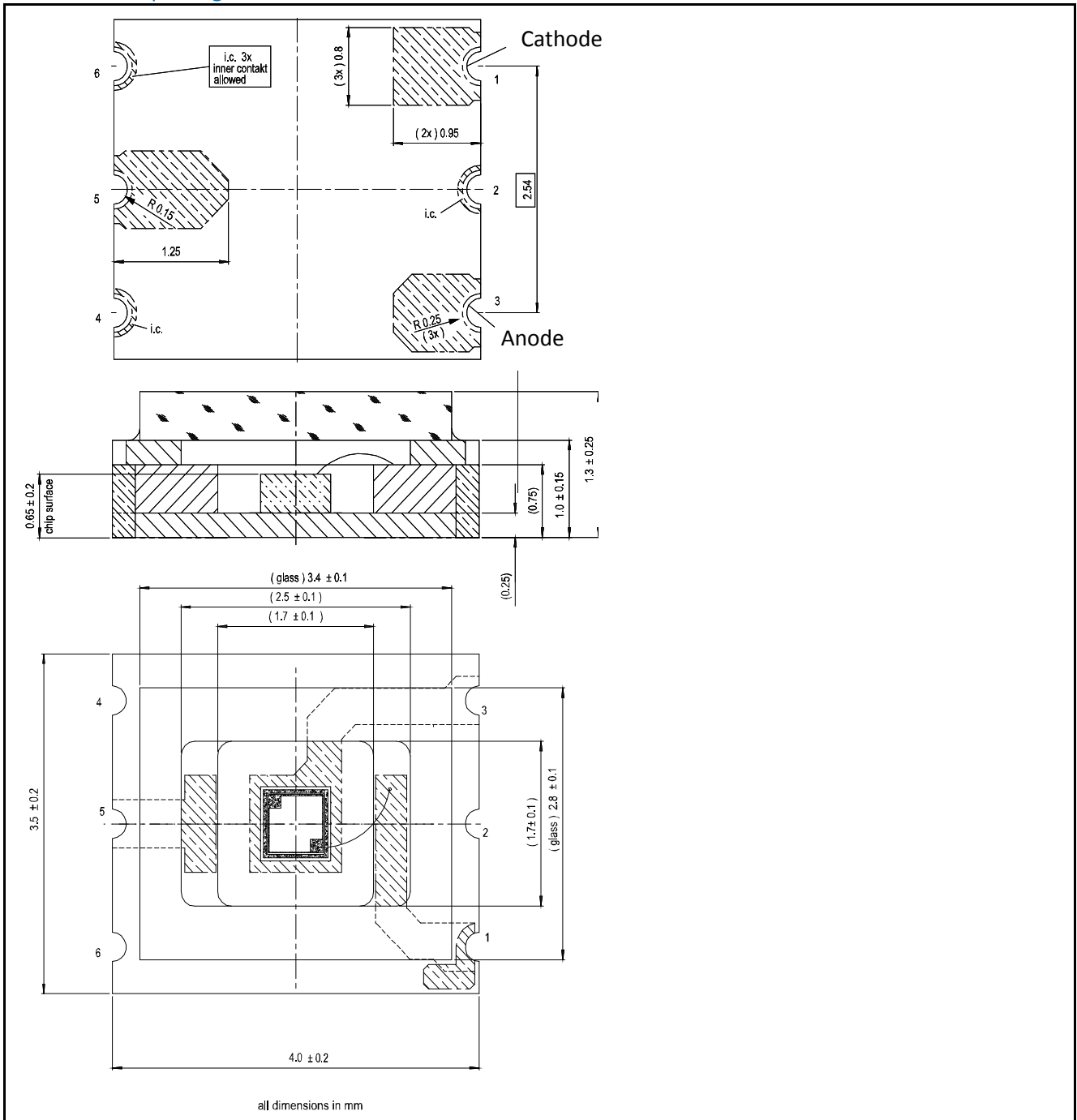
USA:



Pacific Silicon Sensor, Inc.
5700 Corsa Avenue #105
Westlake Village
CA 91362 USA
Phone: +1-818-706-3400
Fax: +1-818-889-7053
E-Mail: sales@pacific-sensor.com

Technical Drawing, Package: LCC6.1

LCC6.1Q with quartz glass cover # 500981



European, International Sales:



International AG

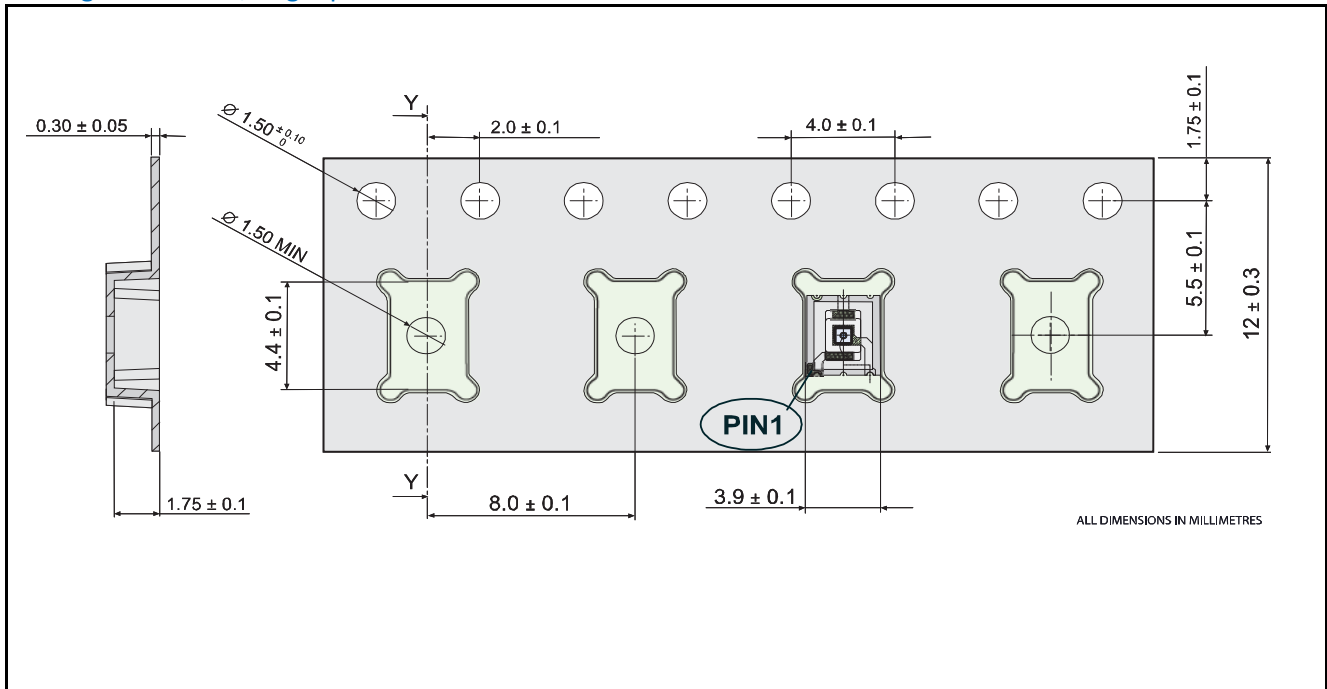
Silicon Sensor International AG
 Peter-Behrens-Strasse 15
 12459 Berlin
 Germany
 Phone: +49-30-6399-2399
 Fax: +49-30-6399-23752
 E-Mail: sales@silicon-sensor.com

USA:

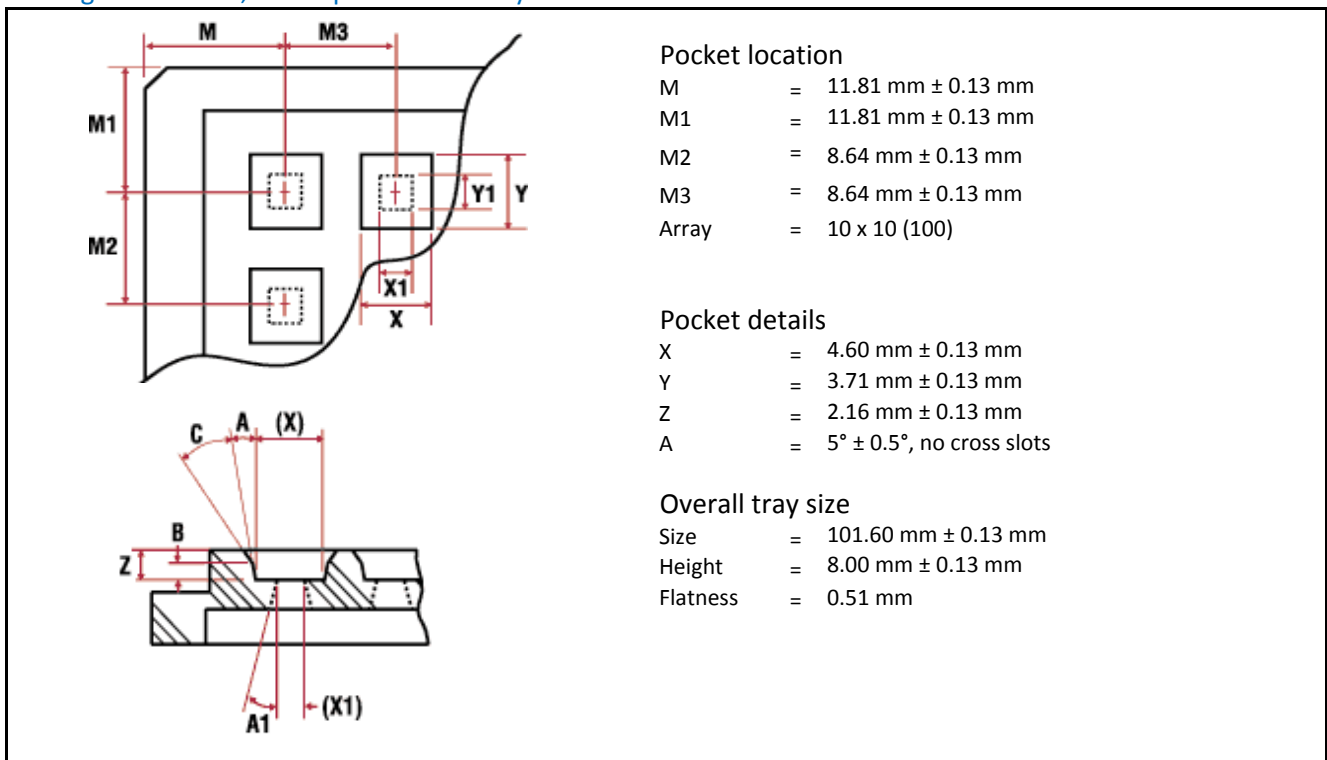


Pacific Silicon Sensor, Inc.
 5700 Corsa Avenue #105
 Westlake Village
 CA 91362 USA
 Phone: +1-818-706-3400
 Fax: +1-818-889-7053
 E-Mail: sales@pacific-sensor.com

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:



Silicon Sensor International AG

Silicon Sensor International AG
 Peter-Behrens-Strasse 15
 12459 Berlin
 Germany
 Phone: +49-30-6399-2399
 Fax: +49-30-6399-23752
 E-Mail: sales@silicon-sensor.com

USA:



Pacific Silicon Sensor, Inc.
 5700 Corsa Avenue #105
 Westlake Village
 CA 91362 USA
 Phone: +1-818-706-3400
 Fax: +1-818-889-7053
 E-Mail: sales@pacific-sensor.com