
Features

- 16 mm² PSD
- Dual-axis, duo-lateral
- High position resolution
- High NIR sensitivity

Description

Square active area position sensing PIN photodiode with 16 mm² active area. Ceramic carrier type non-hermetic package with clear glass window.

Application

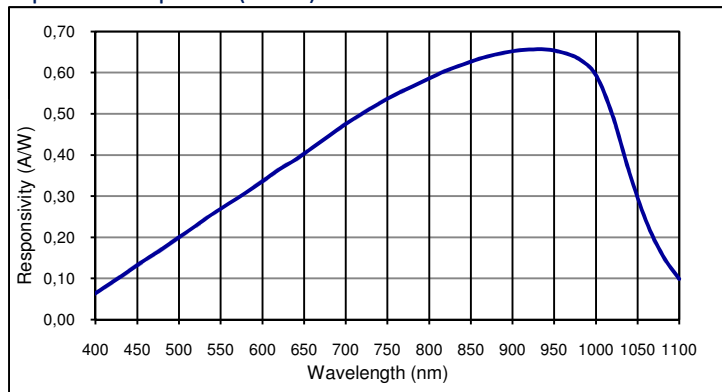
- Laser positioning
- Precision photometry
- Instrumentation
- Medical equipment
- Pulsed light sensor

RoHS

2002/95/EC


Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T _{STG}	Storage temp	-20	60	°C
T _{OP}	Operating temp	-20	80	°C
V _{max}	Max reverse voltage	15		V
I _{PEAK}	Peak DC current		10	mA

Spectral response (23 °C)

Electro-optical characteristics @ 23 °C

Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		4000 x 4000			µm
	Active area		16.0			mm ²
I _D	Dark current	V _R = 10 V		5	30	nA
C	Capacitance	V _R = 0 V		80		pF
		V _R = 10 V		15		pF
	Responsivity	λ = 633 nm		0.4		A/W
		λ = 850 nm		0.62		A/W
t _R	Rise time	V _R = 10 V; λ = 865 nm; R _L = 50 Ω		500	1000	ns
	Interelectrode Resistance	E = 0 lx		10		kΩ
	Noise lim. resolution	λ = 632 nm; P = 0.5 µW, spot dia. 0.5 mm		0.06		µm
	Position detection error	λ = 632 nm; P = 0.5 µW, spot dia. 0.5 mm		± 1		%
V _{BR}	Breakdown voltage	I _R = 2 µA		15		V

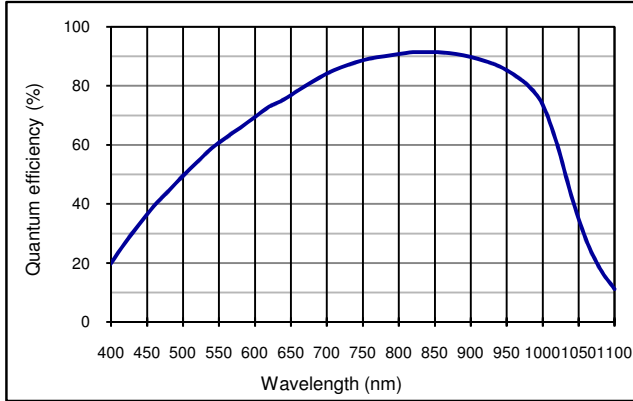
European, International Sales:


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

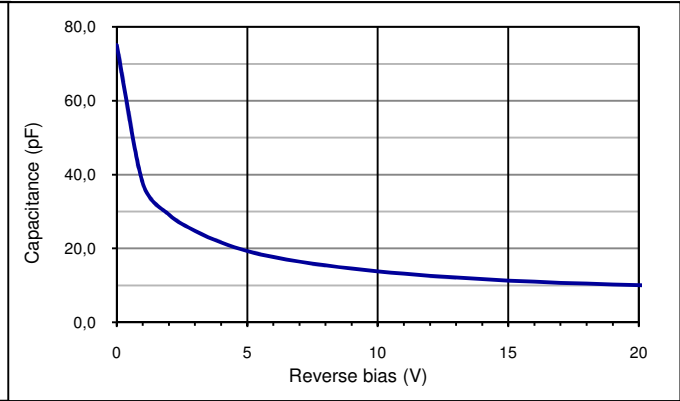
USA:


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

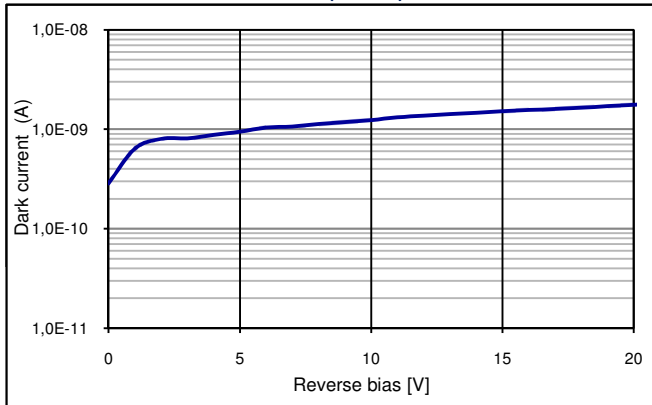
Quantum efficiency (23 °C)



Capacitance as fct of reverse bias (23 °C)



Dark current as fct of bias (23 °C)



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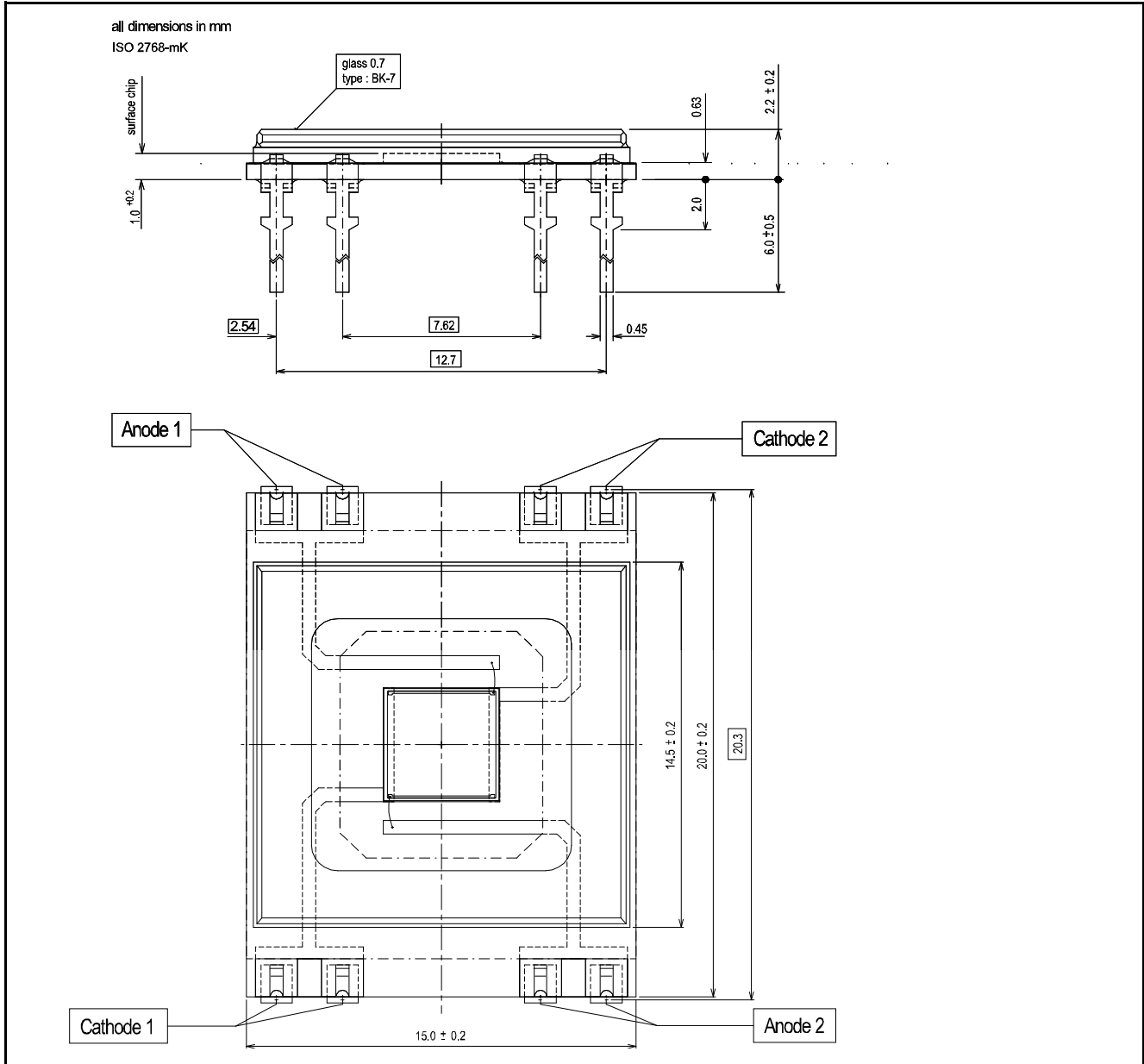


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Technical Drawing, Package: CERpin

Package dimension:

Small quantities: Foam pad, boxed (12 cm x 16.5 cm)

Handling:

Please refer to document "Instructions for handling and processing"

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

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