

### Features

- 100 mm<sup>2</sup> PSD
- Dual-axis, duo-lateral
- High position resolution
- High NIR sensitivity

### Description

Square active area position sensing PIN photodiode with 100 mm<sup>2</sup> active area. Ceramic carrier type non-hermetic package with clear glass window.

### Application

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

### RoHS

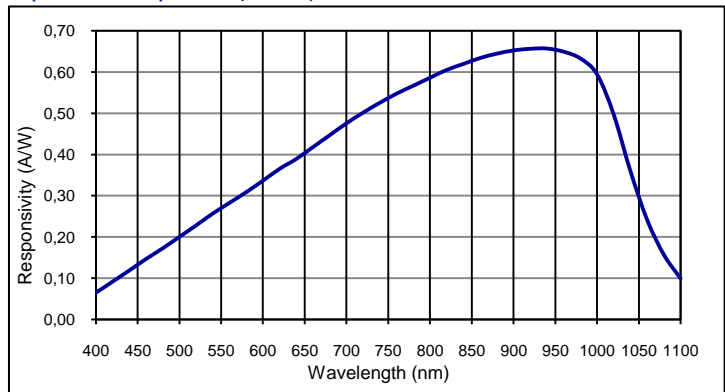
2002/95/EC



### Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T <sub>STG</sub>	Storage temp	-20	80	°C
T <sub>OP</sub>	Operating temp	-20	60	°C
V <sub>max</sub>	Max reverse voltage	20		V
I <sub>PEAK</sub>	Peak DC current		10	mA

### Spectral response (23 °C)



### Electro-optical characteristics @ 23 °C

Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		10 x 10			mm
	Active area		100.0			mm <sup>2</sup>
I <sub>D</sub>	Dark current	V <sub>R</sub> = 10 V		80	300	nA
C	Capacitance	V <sub>R</sub> = 0 V		225		pF
		V <sub>R</sub> = 10 V		75		pF
		λ = 633 nm		0.4		A/W
	Responsivity	λ = 850 nm		0.62		A/W
t <sub>R</sub>	Rise time	V <sub>R</sub> = 10 V; λ = 865 nm; R <sub>L</sub> = 50 Ω		4000		ns
	Interelectrode Resistance	E = 0 lx		12		kΩ
	Noise lim. resolution	λ = 632 nm; P = 0.5 μW, spot dia. 0.5 mm		0.2		μm
	Position detection error	λ = 632 nm; P = 0.5 μW, spot dia. 0.5 mm		± 1		%
V <sub>BR</sub>	Breakdown voltage	I <sub>R</sub> = 2 μA		30		V

#### European, International Sales:



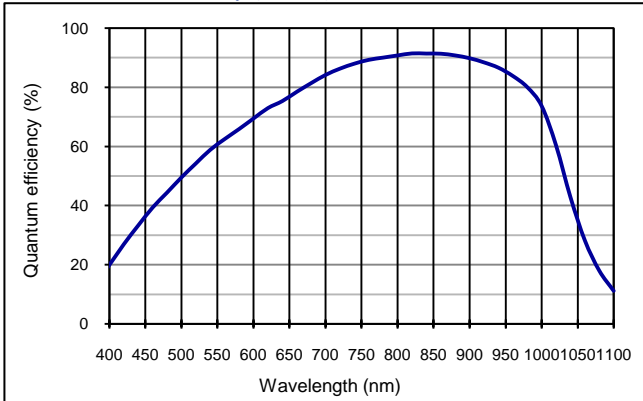
First Sensor AG  
 Peter-Behrens-Strasse 15  
 12459 Berlin  
 Germany  
 T +49 30 6399 2399  
 F +49 30 639923-752  
 sales.opto@first-sensor.com

#### USA:

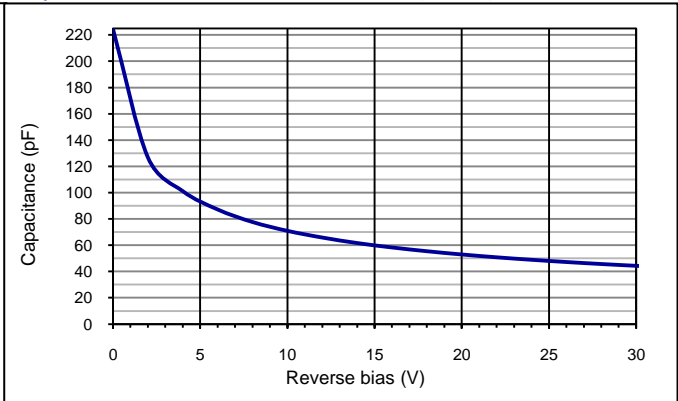


First Sensor Inc.  
 5700 Corsa Avenue #105  
 Westlake Village  
 CA 91362 USA  
 T +1 818 706 3400  
 F +1 818 889 7053  
 sales.us@first-sensor.com

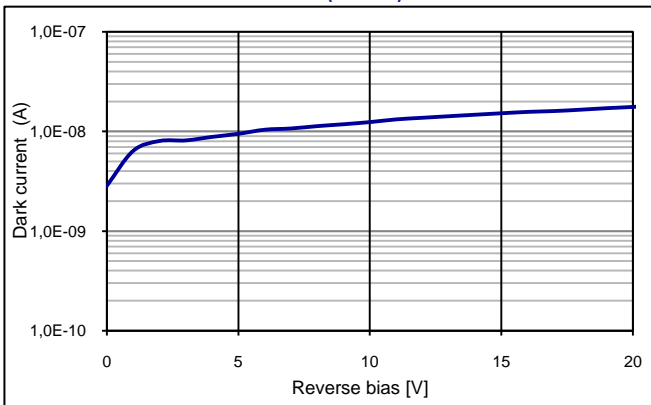
Quantum efficiency (23 °C)



Capacitance as fct of reverse bias (23 °C)



Dark current as fct of bias (23 °C)



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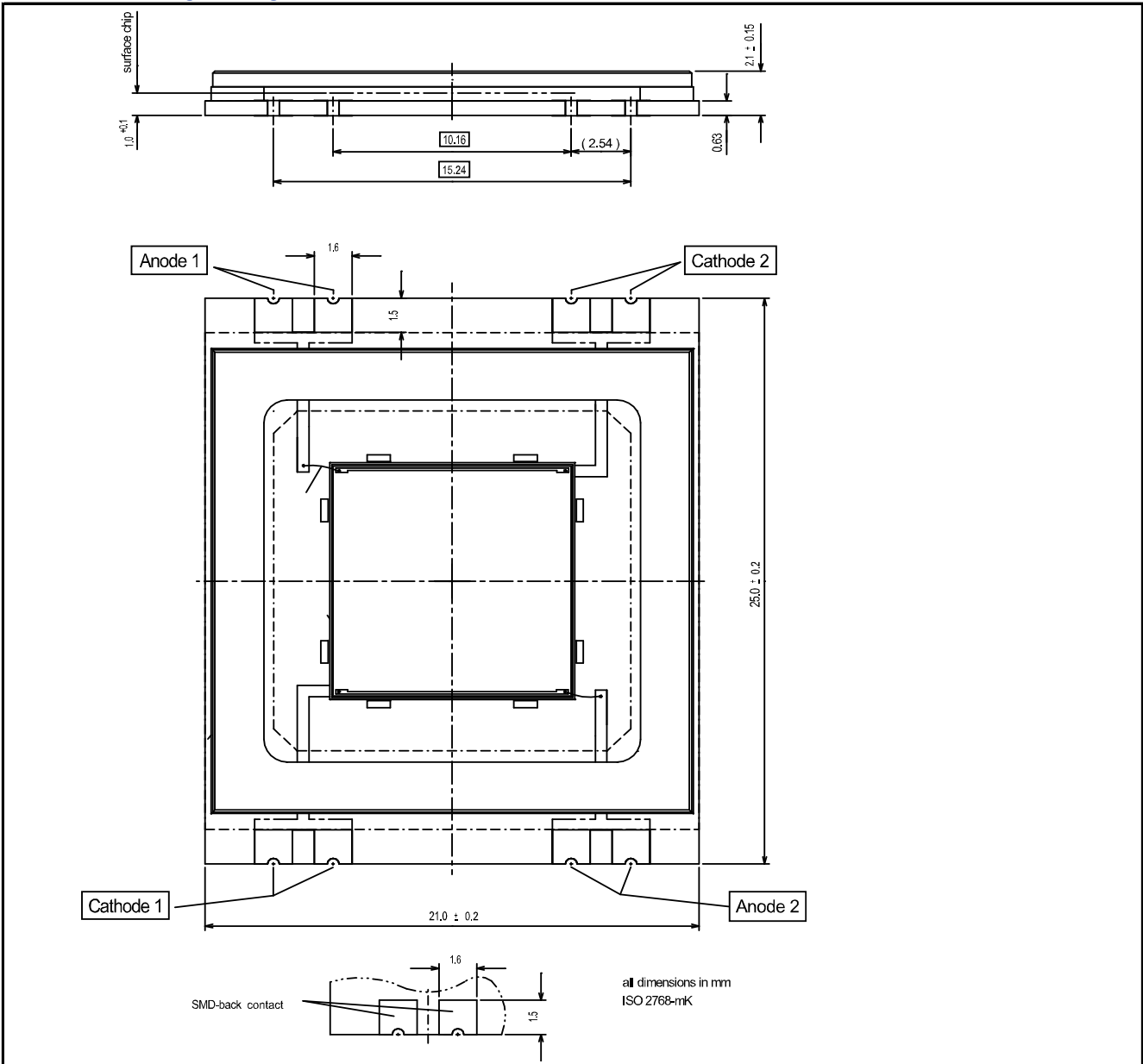


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**Technical Drawing, Package: CERsmd**

**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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