

### Features

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

### Description

Square active area position sensing PIN photodiode with 16 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

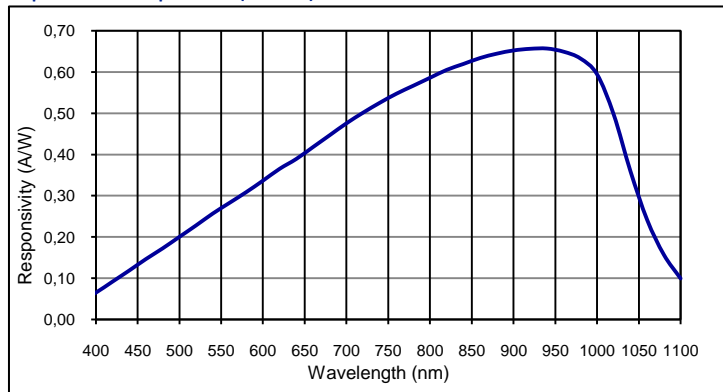
2002/95/EC



### 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	15		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		4000 x 4000			µm
	Active area		16.0			mm <sup>2</sup>
I <sub>D</sub>	Dark current	V <sub>R</sub> = 10 V		5	30	nA
C	Capacitance	V <sub>R</sub> = 0 V		80		pF
		V <sub>R</sub> = 10 V		15		pF
	Responsivity	λ = 633 nm		0.4		A/W
		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		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 <sub>BR</sub>	Breakdown voltage	I <sub>R</sub> = 2 µA		15		V

#### European, International Sales:



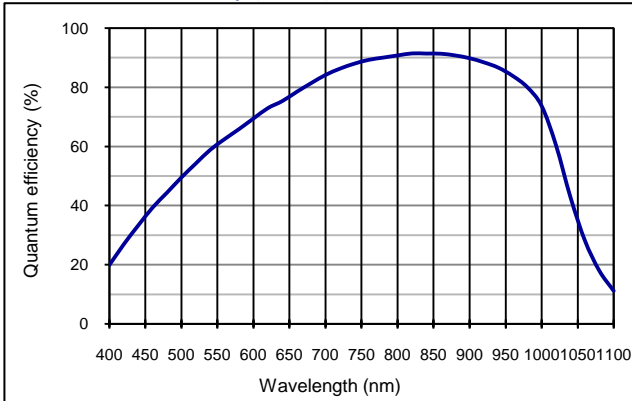
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#### USA:

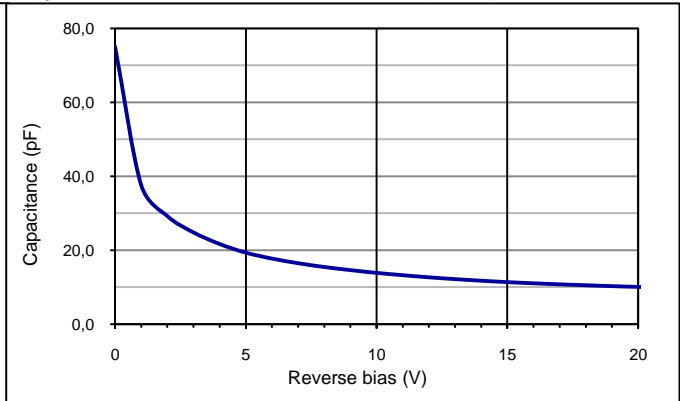


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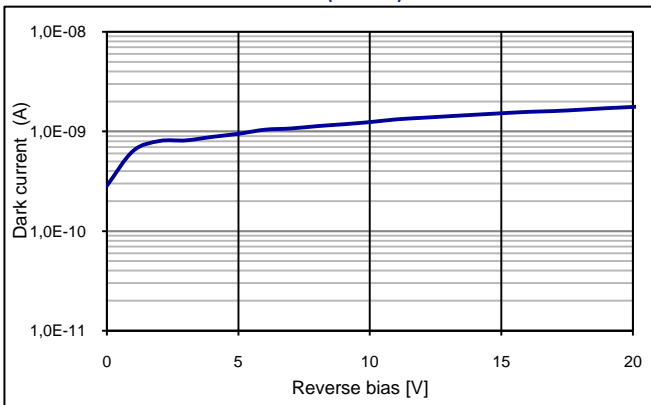
Quantum efficiency (23 °C)



Capacitance as fct of reverse bias (23 °C)



Dark current as fct of bias (23 °C)



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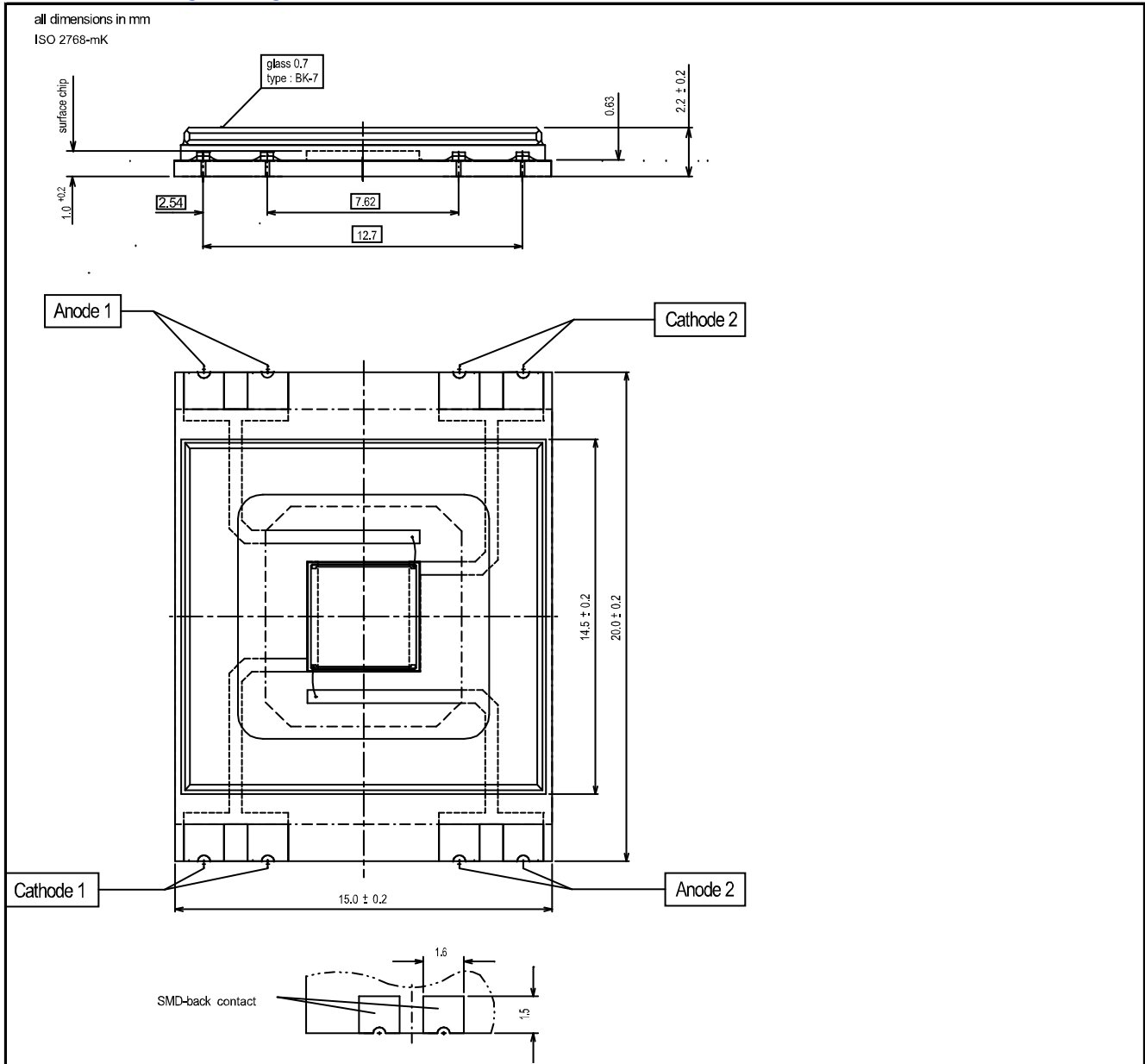
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Technical Drawing, Package: CERsmd



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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