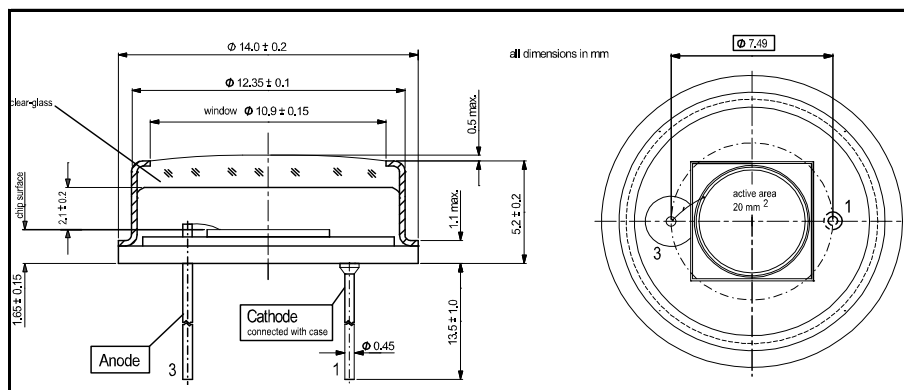




Features

- PIN PD with 20 mm² active area
- High speed epitaxy
- Fast response time
- Low dark current

Description

High speed epitaxy PIN photodiode with 20 mm² circular active area. Metal can type hermetic TO8 package with clear glass window.

Application

- Pulsed light detection
- High speed photometry
- High speed optical communications
- Fiber optic light monitoring

RoHS

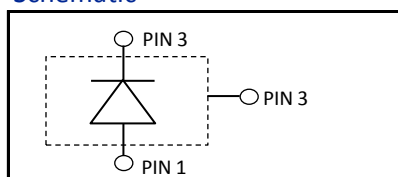
2002/95/EC



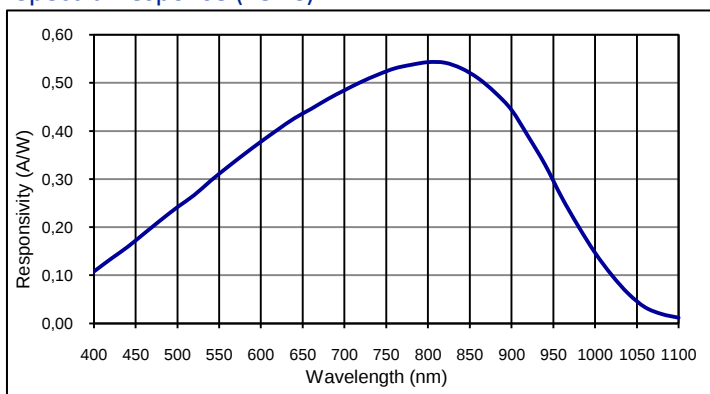
Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T_{STG}	Storage temp	-55	125	°C
T_{OP}	Operating temp	-40	100	°C
V_{max}	Max reverse voltage		30	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		diameter 5050			μm
	Active area		20			mm²
I_D	Dark current	$V_R = 20$ V		2	5	nA
C	Capacitance	$V_R = 0$ V		300		pF
		$V_R = 20$ V		65		pF
	Responsivity	$\lambda = 632$ nm		0.4		A/W
		$\lambda = 800$ nm		0.52		A/W
t_R	Rise time	$V_R = 20$ V; $\lambda = 850$ nm; $R_L = 50$ Ω		3.5		ns
	Shunt Resistance	$V_R = 10$ mV		50		MΩ
	N.E.P.	$V_R = 20$ V; $\lambda = 850$ nm		4.9 E-14		W/√Hz
V_{BR}	Breakdown voltage	$I_R = 2$ μA	30	50		V

European, International Sales:



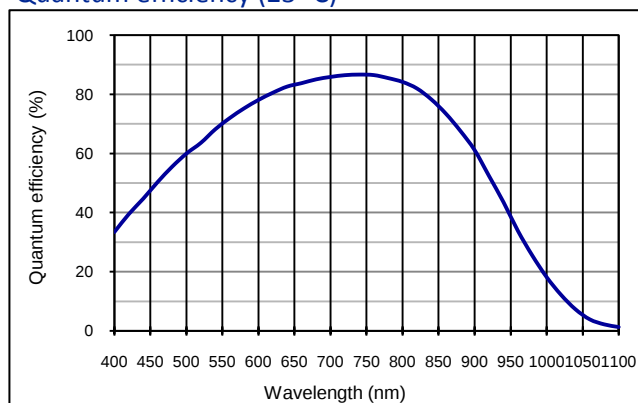
First Sensor AG
Peter-Behrens-Strasse 15
12459 Berlin
Germany
T +49 30 6399 2399
F +49 30 639923-752
sales.opto@first-sensor.com

USA:

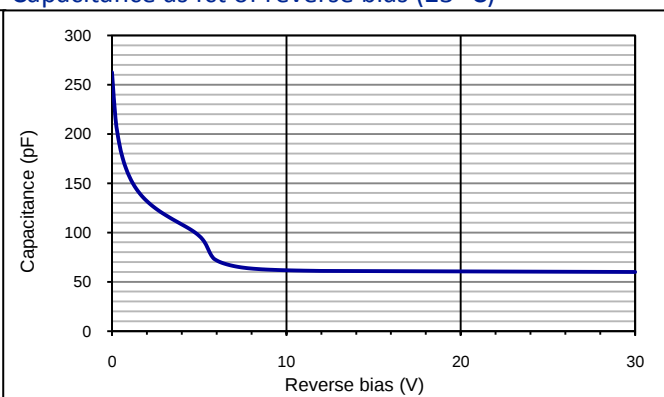


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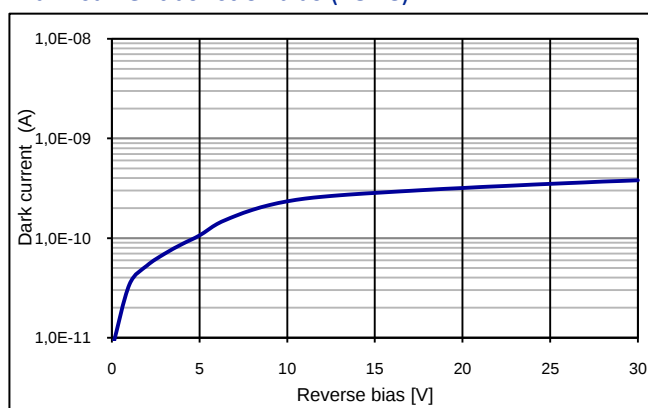
Quantum efficiency (23 °C)



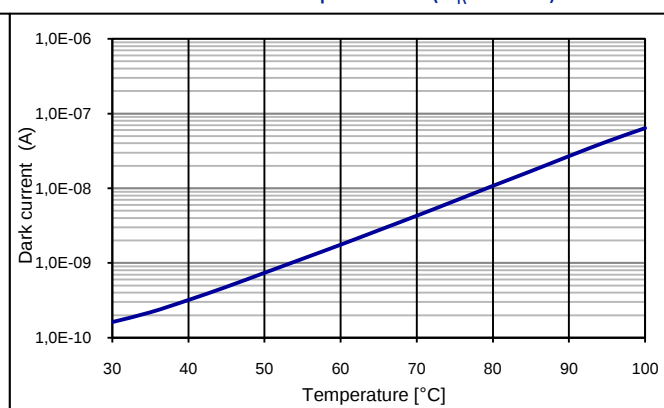
Capacitance as fct of reverse bias (23 °C)



Dark current as fct of bias (23 °C)



Dark current as fct of temperature ($V_R = 10$ 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)

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

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