
**Features**

- 2660  $\mu\text{m}$  x 2660  $\mu\text{m}$  active area
- Low dark current
- Fast response time
- High speed epitaxy
- Fully depleted at 3.5 V
- Optimized for blue light

**Description**

High speed epitaxy PIN photodiode with 7.1 mm<sup>2</sup> square active area. Metal can type hermetic TO5 package with UV clear window. Other packaging options available upon special request.

**Application**

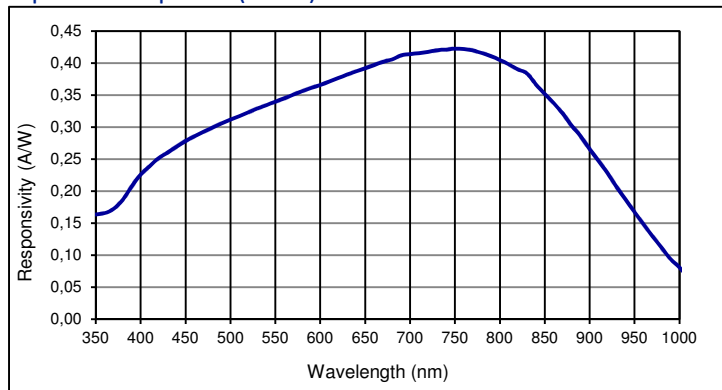
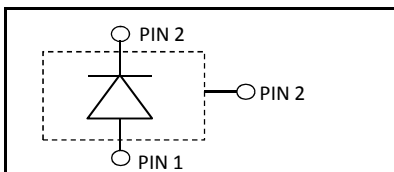
- Pulsed light detection
- High speed photometry
- High speed optical communications
- Laser monitoring

**RoHS**

2002/95/EC


**Absolute maximum ratings**

Symbol	Parameter	Min	Max	Unit
$T_{STG}$	Storage temp	-55	125	$^\circ\text{C}$
$T_{OP}$	Operating temp	-40	100	$^\circ\text{C}$
$V_{max}$	Max reverse voltage		30	V
$I_{PEAK}$	Peak DC current		10	mA

**Spectral response (23  $^\circ\text{C}$ )**

**Schematic**

**Electro-optical characteristics @ 23  $^\circ\text{C}$** 

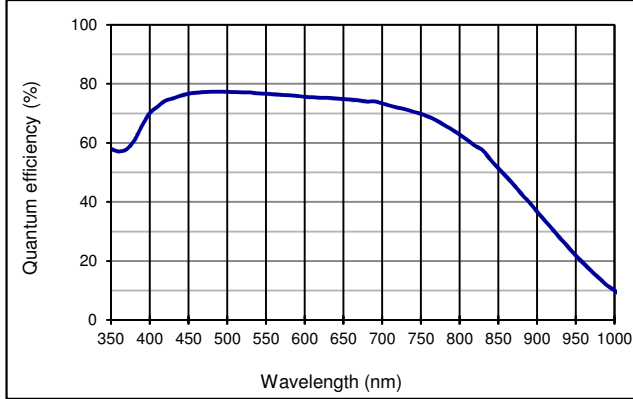
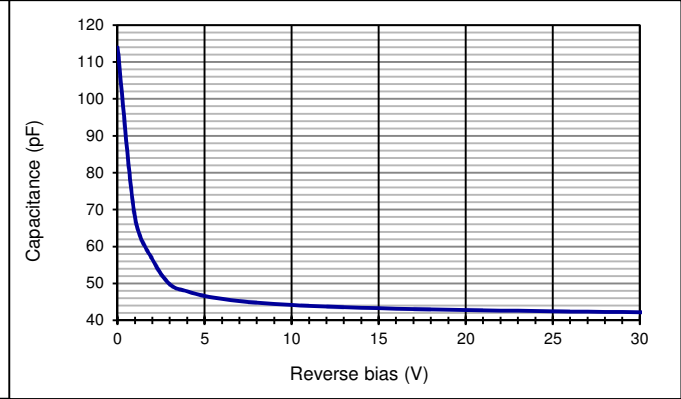
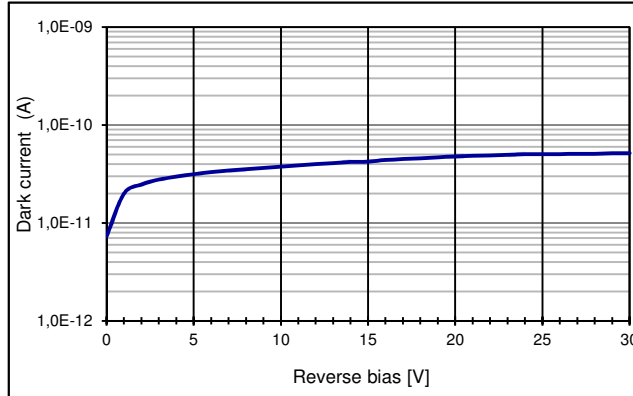
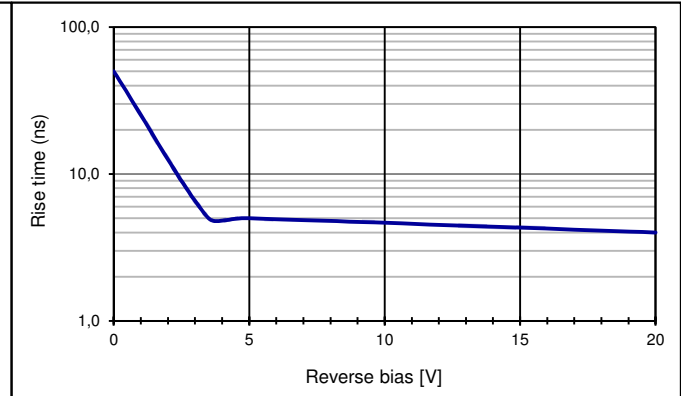
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		2660 x 2660			$\mu\text{m}$
	Active area		7.1			mm <sup>2</sup>
$I_D$	Dark current	$V_R = 0\text{ V}$		0.020	0.1	nA
		$V_R = 3.5\text{ V}$		0.040	0.2	nA
C	Capacitance	$V_R = 0\text{ V}$		120	150	pF
		$V_R = 3.5\text{ V}$		50	65	pF
	Responsivity	$\lambda = 355\text{ nm}$		0.16		A/W
		$\lambda = 405\text{ nm}$		0.23		A/W
$t_R$	Rise time	$V_R = 3.5\text{ V}; \lambda = 405\text{ nm}; R_L = 50\ \Omega$		5		ns
		$V_R = 20\text{ V}; \lambda = 405\text{ nm}; R_L = 50\ \Omega$		4		ns
$V_{BR}$	Breakdown voltage	$I_R = 2\ \mu\text{A}$	30			V
	Shunt resistance	$V_R = 10\text{ mV}$		500		M $\Omega$
	N.E.P.	$V_R = 3.5\text{ V}; \lambda = 405\text{ nm}$		1.6 E-14		W/ $\sqrt{\text{Hz}}$

**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)**

**Rise time as fct of bias (23 °C)**

**Application hints:**

Please refer to document "Instructions for handling and processing"

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