
**Features**

- PIN PD with  $20 \text{ mm}^2$  active area
- High speed epitaxy
- Fast response time
- Low dark current

**Description**

High speed epitaxy PIN photodiode with  $20 \text{ mm}^2$  circular active area. Metal can type hermetic TO8 package with clear glass window.

**Application**

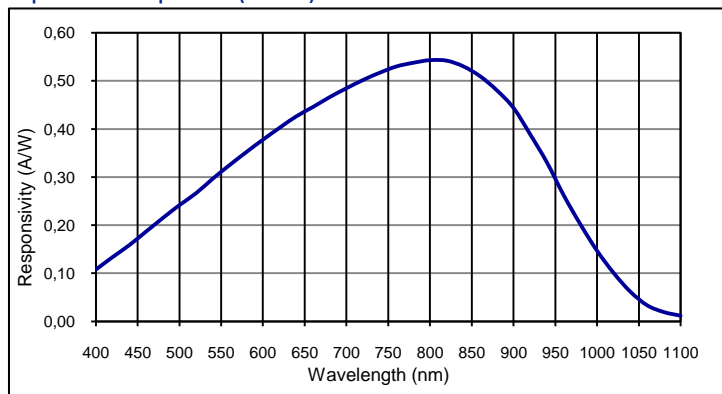
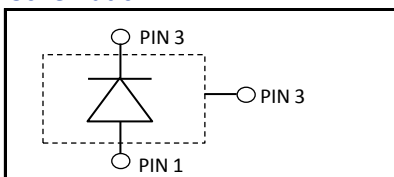
- Pulsed light detection
- High speed photometry
- High speed optical communications
- Fiber optic light monitoring

**RoHS**

2002/95/EC


**Absolute maximum ratings**

Symbol	Parameter	Min	Max	Unit
$T_{STG}$	Storage temp	-55	125	$^{\circ}\text{C}$
$T_{OP}$	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  $^{\circ}\text{C}$** 

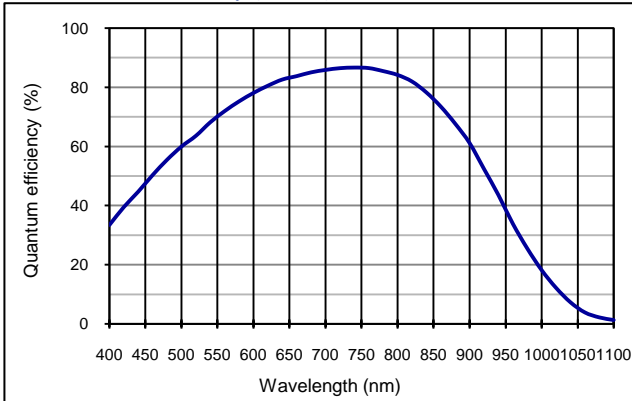
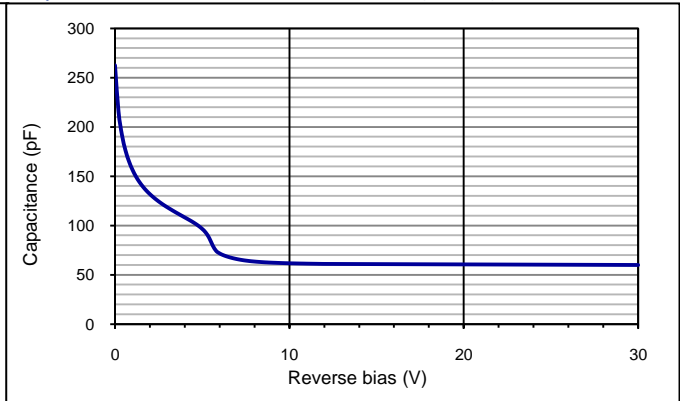
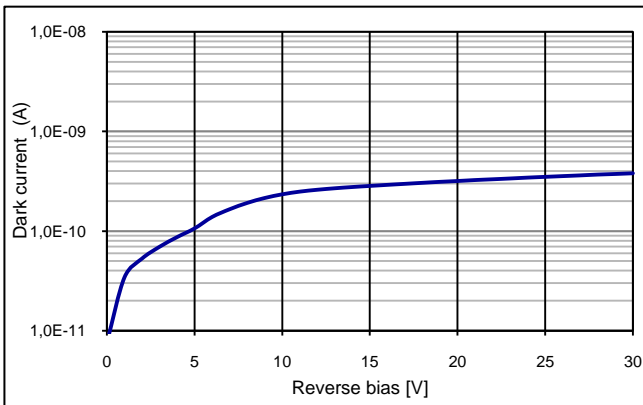
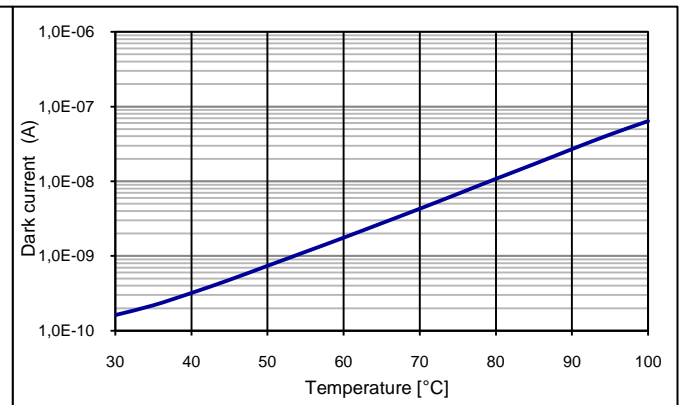
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		diameter 5050			$\mu\text{m}$
	Active area		20			$\text{mm}^2$
$I_D$	Dark current	$V_R = 20 \text{ V}$		2	5	nA
C	Capacitance	$V_R = 0 \text{ V}$		300		pF
		$V_R = 20 \text{ V}$		65		pF
	Responsivity	$\lambda = 632 \text{ nm}$		0.4		A/W
		$\lambda = 800 \text{ nm}$		0.52		A/W
$t_R$	Rise time	$V_R = 20 \text{ V}; \lambda = 850 \text{ nm}; R_L = 50 \Omega$		3.5		ns
	Shunt Resistance	$V_R = 10 \text{ mV}$		50		$\text{M}\Omega$
	N.E.P.	$V_R = 20 \text{ V}; \lambda = 850 \text{ nm}$		$4.9 \text{ E-14}$		$\text{W}/\sqrt{\text{Hz}}$
$V_{BR}$	Breakdown voltage	$I_R = 2 \mu\text{A}$	30	50		V

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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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