
Features

- 3.5 mm x 3.5 mm 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 13 mm² square active area. Metal can type hermetic TO5 package with UV clear window. Other packaging options available upon special request.

Application

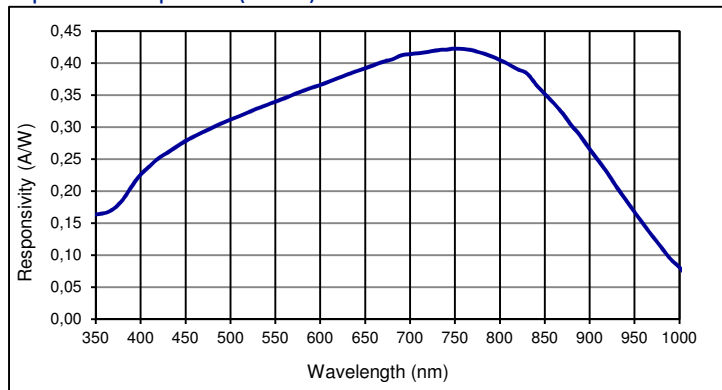
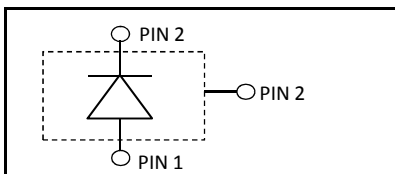
- Pulsed light detection
- High speed photometry
- High speed optical communications
- Laser monitoring

RoHS

2002/95/EC


Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T _{STG}	Storage temp	-55	125	°C
T _{OP}	Operating temp	-40	100	°C
V _{max}	Max reverse voltage		30	V
I _{PEAK}	Peak DC current		10	mA

Spectral response (23 °C)

Schematic

Electro-optical characteristics @ 23 °C

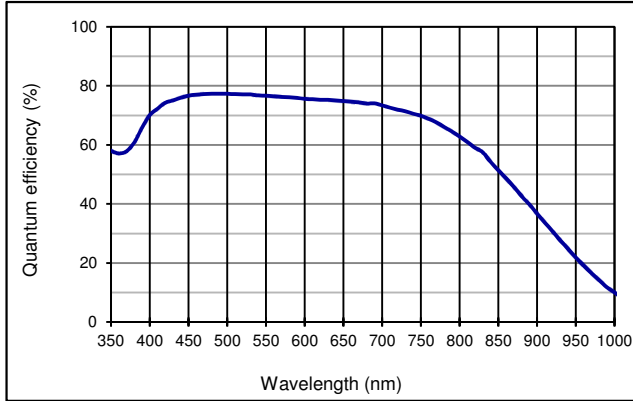
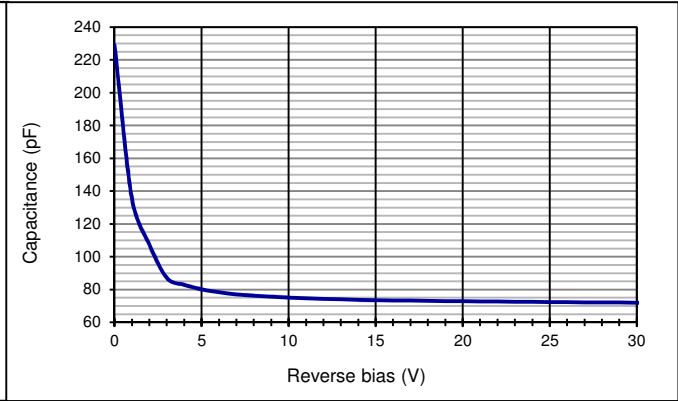
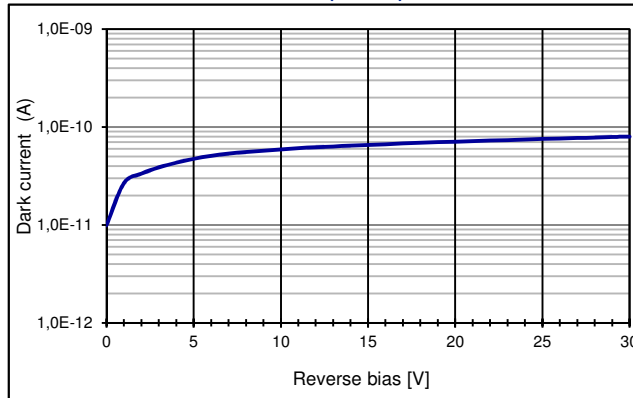
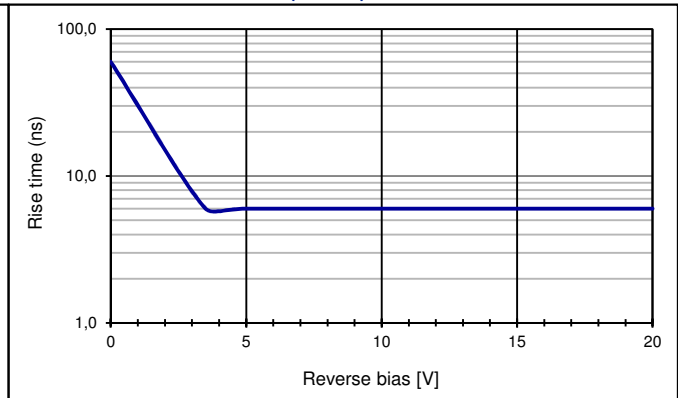
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		3504 x 3504			µm
	Active area		13			mm ²
I _D	Dark current	V _R = 0 V		0.040	0.2	nA
		V _R = 3.5 V		0.080	0.4	nA
C	Capacitance	V _R = 0 V		230	300	pF
		V _R = 3.5 V		85	100	pF
	Responsivity	λ = 355 nm		0.16		A/W
		λ = 405 nm		0.23		A/W
t _R	Rise time	V _R = 3.5 V; λ = 405 nm; R _L = 50 Ω		6		ns
		V _R = 20 V; λ = 405 nm; R _L = 50 Ω		6		ns
V _{BR}	Breakdown voltage	I _R = 2 µA	30			V
	Shunt resistance	V _R = 10 mV		250		MΩ
	N.E.P.	V _R = 3.5 V; λ = 405 nm		3.2 E-14		W/√Hz

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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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