
Features

- 840 µm diameter active area
- Low dark current
- Fast response time
- High speed epitaxy
- Fully depleted at 3.5 V

Description

High speed epitaxy PIN photodiode with 0.55 mm² circular active area. Moulded plastic flat top T1 3/4 package; daylight filter plastic available (#501290). Reflow solderable.

Application

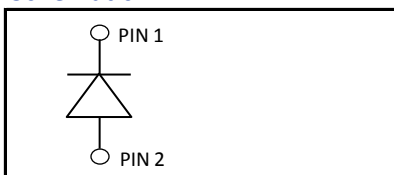
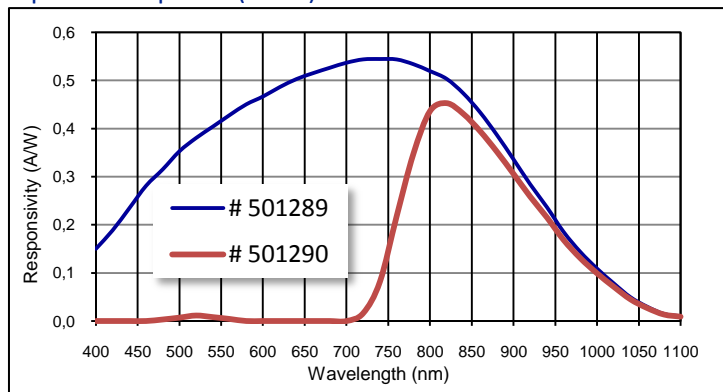
- Pulsed light detection
- High speed photometry
- High speed optical communications
- Fiber optic light monitoring

RoHS

2002/95/EC


Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T _{STG}	Storage temp	-40	100	°C
T _{OP}	Operating temp	-20	70	°C
V _{max}	Max reverse voltage		20	V
I _{PEAK}	Peak DC current		10	mA

Schematic

Spectral response (23 °C)

Electro-optical characteristics @ 23 °C

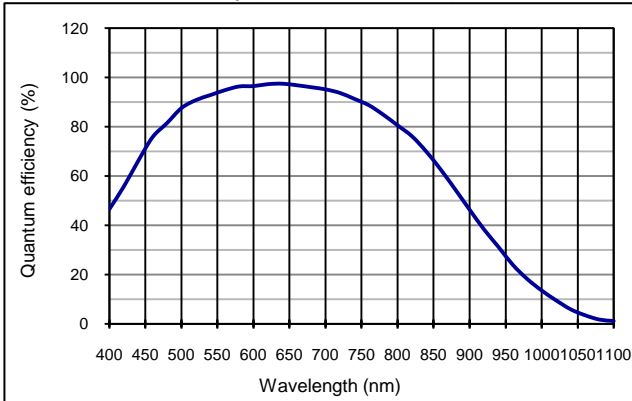
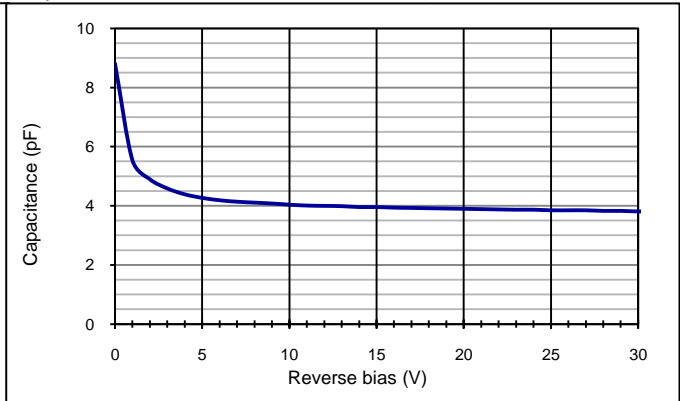
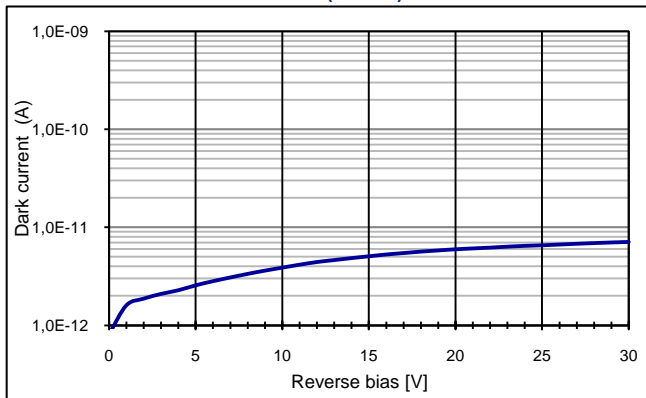
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		diameter 840			µm
			0.55			mm ²
I _D	Dark current	V _R = 3.5 V		0.01	0.1	nA
C	Capacitance	V _R = 0 V		10		pF
		V _R = 3.5 V		4.4		pF
# 501289	Responsivity	λ = 635 nm		0.49		A/W
		λ = 800 nm		0.52		A/W
# 501290	Responsivity	λ = 800 nm		0.44		A/W
		λ = 900 nm		0.33		A/W
t _R	Rise time	V _R = 3.5 V; λ = 850 nm; R _L = 50 Ω		1.0		ns
V _{BR}	Breakdown voltage	I _R = 2 µA	20	180		V
	Shunt resistance	V _R = 10 mV		10000		MΩ
	N.E.P.	V _R = 3.5 V; λ = 850 nm;		4 E-15		W/√Hz

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Quantum efficiency (23 °C; # 501289)

Capacitance as fct of reverse bias (23 °C)

Dark current as fct of bias (23 °C)

Application hints:

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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