
**Features**

- 500  $\mu\text{m}$  x 500  $\mu\text{m}$  active area
- Low dark current
- Fast response time
- High speed epitaxy

**Description**

High speed epitaxy PIN photodiode with 0.25 mm<sup>2</sup> square active area. PCB carrier type non hermetic SMD 1206 package with epoxy moulding. Reflow solderable.

**Application**

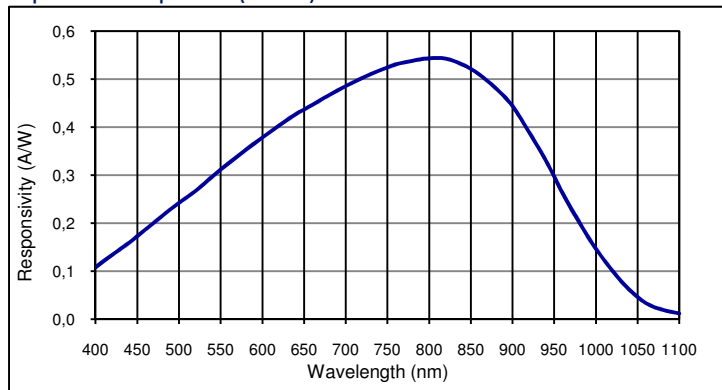
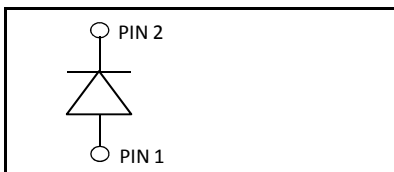
- Pulsed light detection
- High speed photometry
- High speed optical communications
- Fiber optic light monitoring

**RoHS**

2002/95/EC


**Absolute maximum ratings**

Symbol	Parameter	Min	Max	Unit
$T_{STG}$	Storage temp	-25	100	$^{\circ}\text{C}$
$T_{OP}$	Operating temp	-20	70	$^{\circ}\text{C}$
$V_{max}$	Max reverse voltage		30	V
$I_{PEAK}$	Peak DC current		10	mA

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

**Schematic**

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

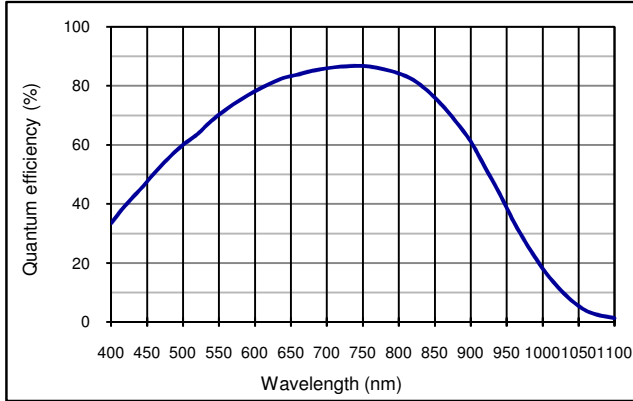
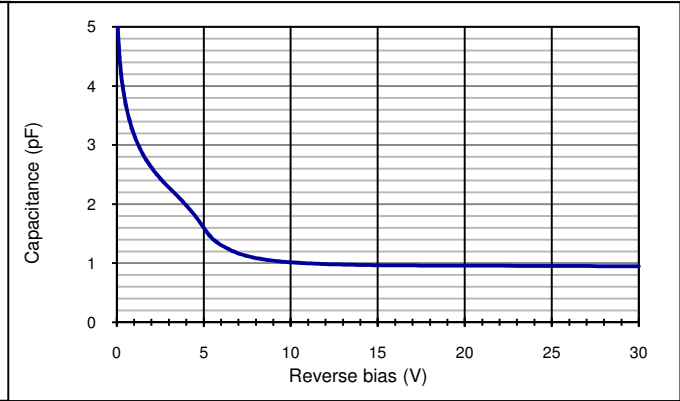
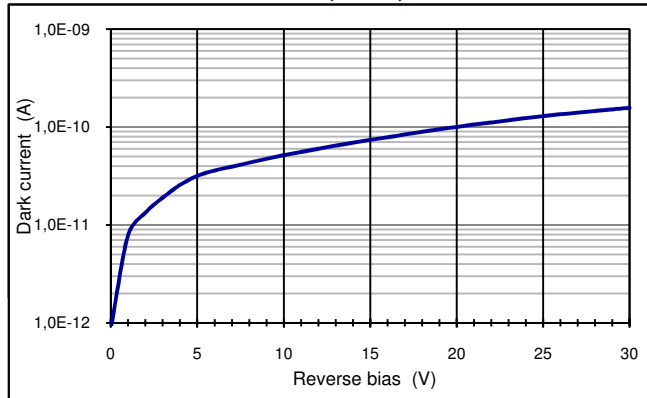
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	Active area		500 x 500			$\mu\text{m}$
	Active area		0.25			mm <sup>2</sup>
$I_D$	Dark current	$V_R = 20\text{ V}$		0.1		nA
$C$	Capacitance	$V_R = 0\text{ V}$		6		pF
$C$	Capacitance	$V_R = 20\text{ V}$		1.8		pF
	Responsivity	$\lambda = 635\text{ nm}$		0.4		A/W
	Responsivity	$\lambda = 800\text{ nm}$		0.52		A/W
$t_R$	Rise time	$V_R = 20\text{ V}; \lambda = 850\text{ nm}; R_L = 50\ \Omega$		0.4		ns
$V_{BR}$	Breakdown voltage	$I_R = 2\ \mu\text{A}$	30	50		V
	Shunt resistance	$V_R = 10\text{ mV}$		1000		M $\Omega$
	N.E.P.	$V_R = 20\text{ V}; \lambda = 850\text{ nm}$		1.1 E-14		W/ $\sqrt{\text{Hz}}$

**European, International Sales:**


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 E-Mail: sales@pacific-sensor.com

**Quantum efficiency (23 °C)**

**Capacitance as fct of reverse bias (23 °C)**

**Dark current as fct of bias (23 °C)**

**Application hints:**

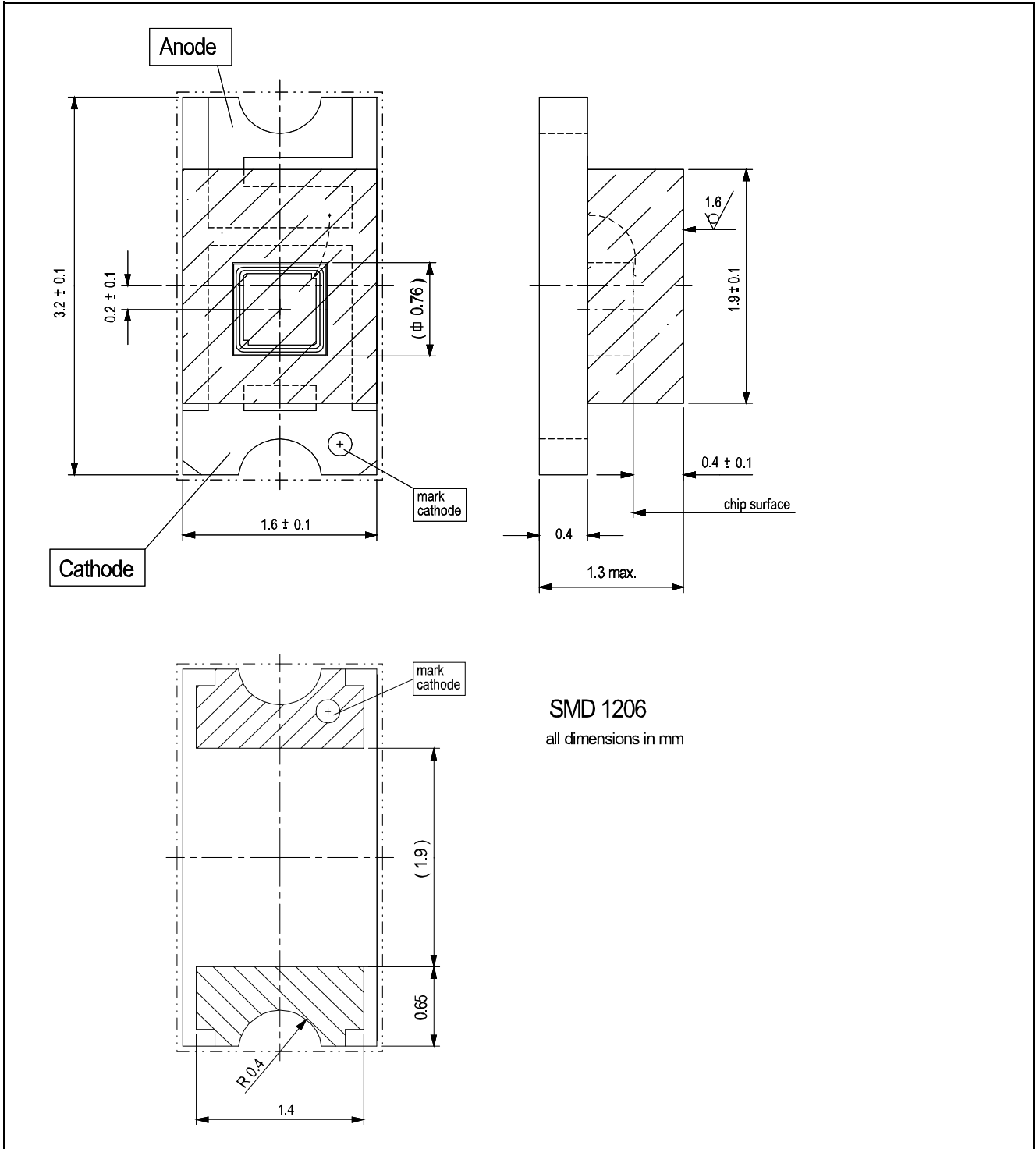
Please refer to document "Instructions for handling and processing"

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**Technical Drawing, Package: SMD1206**


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

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