



PX511-2

TECHNICAL DATA

Photodiode Chip die

PX511-2 is a PIN PD of planar and front illuminated structure with P electrode on top and N electrode on bottom.

Features

- InGaAs structure
- Spectral width: 1.0 – 1.65 μm
- Active Area: \varnothing 300 μm



Absolute Maximum Ratings

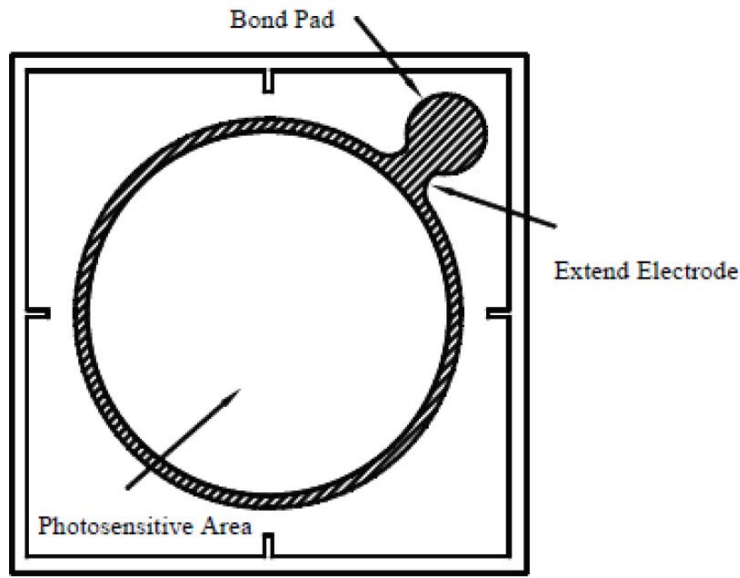
Item	Symbol	Value	Unit
Optical Current	I_{PD}	10	mA
Forward Current	I_F	10	mA
Reverse Current	I_R	10	mA
ESD threshold		>300	V
Operating Temperature	T_{opr}	-40 ... +85	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-50 ... +125	$^{\circ}\text{C}$

Specifications (TC=22 $^{\circ}\text{C}$)

Item	Value	Unit
Wavelength Range	1.00 .. 1.68	μm
Active Area	300	μm
Responsivity ($V_R=5\text{V}$, $\lambda=1.31\mu\text{m}$, $\varphi_E=100\mu\text{W}$)	>0.9	A/W
Capacitance ($V_R=5\text{V}$, $\varphi_E=0$, $f=1\text{MHz}$)	5-6	pF
Dark Current ($V_R=5\text{V}$, $\varphi_E=0$)	0.3 – 1.0	nA
Forward Voltage ($I_F=1\text{mA}$)	0.6 – 0.8	V
Reverse Breakdown Voltage ($I_D=10\mu\text{A}$, $\varphi_E=0$)	35 - 40	V
Rising time ($V_R=5\text{V}$, $R_L=50\Omega$)	≤ 4	ns



Dimensions



Item	Value
Die Size	500 x 500 μm
Die Thickness	175 +/- 5 μm
Bond Pad Diameter	75 μm
Photosensitive Area	300 μm
Extended Electrode Length	16 μm
P-side material	Au
N-side material	Au

Packaging: Chips on gel-pack