# **PIN Detector**



The PIN detector is a high-performance photodetector made of InGaAs material, designed specifically for wide wavelength response and high sensitivity applications. It can effectively detect wavelengths in the range of 990nm to 1650nm, featuring excellent responsivity and low dark current characteristics. This makes it highly suitable for optical measurement equipment and laser radar systems.

#### **Key Features**

- High sensitivity
- Low dark current
- Wide wavelength response
- High bandwidth
- Wide operating temperature range

#### Technical Specifications (25°C)

#### Applications

Optical measurement equipment Laser radar systems

Parameter	Symbol	Min. value	Typ. value	Max. value	Unit	Test Conditions
Response wavelength	λ	990		1650	nm	
Responsiveness	R	0.85	0.9		A/W	λ=1310nm
			0.95			λ=1550nm
			0.2			λ=850nm
Dark current	I <sub>D</sub>		1	5	nA	V <sub>R</sub> =-5V
capacitance	С		4.2	6	pF	V <sub>R</sub> =-5V,f=1MHz
Bandwidth	BW		1.8		GHz	3dB down,RL=50Ω

## **Device Limit Parameters**

Parameter	Symbol	Value	Unit	
Reverse Voltage	V <sub>RMAX</sub>	20	V	
Forward Current	I	10	mA	
Operating Temperature	T <sub>opr</sub>	-40~85	°C	
Storage Temperature	Tstg	-40~125	°C	

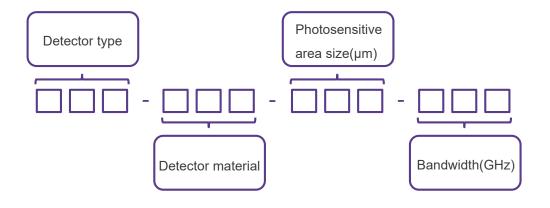




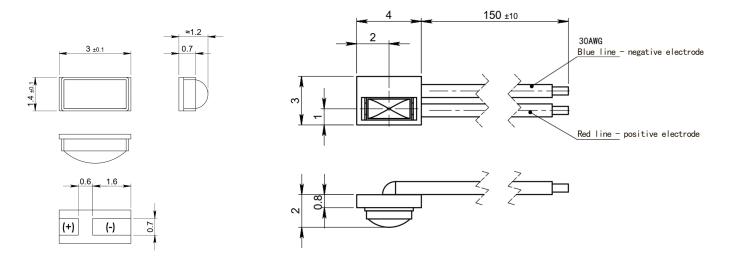
## **Order Information**

Part Number	Photosensitive area size(µm)	Bandwidth(GHz)	Remarks
PIN-InGaAs-300-1.8	200	4.0	-
PIN-InGaAs-300-1.8_PCB3*4*0.8	300	1.8	With PCB

## Part Numbering Schema



Mechanical Drawings (in mm)



PIN-InGaAs-300-1.8 Drawing

PIN-InGaAs-300-1.8\_PCB3\*4\*0.8 Drawing