

# PIGTAIL INTEGRATED InGaAs PIN PHOTODIODE

## PIPD Series

### Features

- ◆ High Responsivity
- ◆ Low Dark Current
- ◆ Quick Response
- ◆ Wide Operating Wavelength
- ◆ High Reliability
- ◆ Laser Welding & Soldering

### Applications

- ◆ Power Monitoring
- ◆ DWDM Systems
- ◆ "Smart" Optical Amplifiers
- ◆ Network Links and Optical Cross-connects
- ◆ Re-configurable Optical Add/Drop Multiplexers
- ◆ Protection/Restoration System

### Pigtail Integrated InGaAs PIN Photodiode

Oplink's PIPD series PIN photodiode is based on InGaAs process. It is designed for power level monitoring in optical network systems. The product features low dark current and high responsivity and wide operating wavelength range.

Oplink can provide customized designs to meet specialized feature applications. Also, Oplink offers modular assemblies that integrate other components to form a full function module or subsystem.

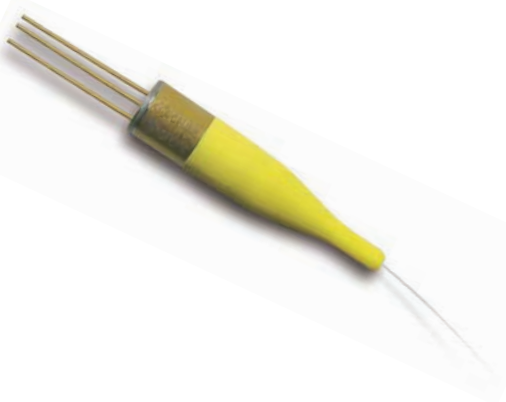
### Performance Specifications

Parameter	Symbol	Min	Typical	Max	Units
Operating Wavelength Range	$\lambda_{op}$	1310±50 or/and 1550±50			nm
Responsivity	@1550nm	R <sub>1550</sub>	0.80	0.90	A/W
	@1310nm	R <sub>1310</sub>	0.75	0.85	A/W
Polarization Dependent Responsivity	PDR		0.1		dB
Dark Current @V <sub>R</sub> =5 V (70°C)	Bandwidth=2.0G	I <sub>d</sub>		2.5	nA
	Bandwidth=0.5G	I <sub>d</sub>		10	nA
Capacitance @V <sub>R</sub> =5 V (1MHz)	Bandwidth=2.0G	C	0.7	1	pF
	Bandwidth=0.5G	C	0.7	8	pF
Return Loss	RL	40			dB
Fiber Type			Corning SMF-28		
Package Dimension	Package 1		Ø5.6 x 26.0		mm
	Package 3/4		Ø3.3 x 17.0		mm

### Environmental Conditions

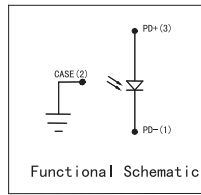
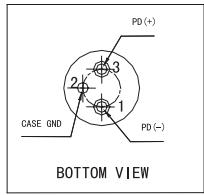
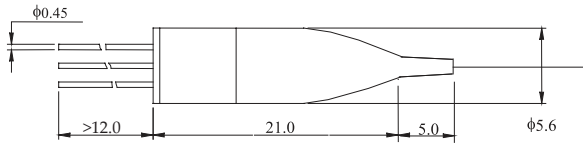
Parameter	Min	Typical	Max	Units
Operational Temperature *	0		70	°C
Storage Temperature *	-40		85	°C
Soldering Temperature (<5s, >2mm from device)			260	°C

\* Not to exceed 0.024 kg water per kg of dry air. Non-condensing Conditions.

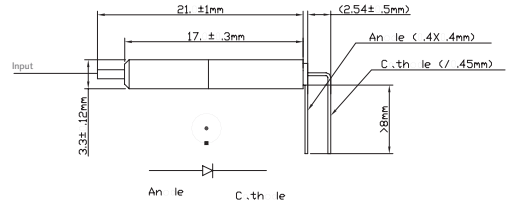


Mechanical Drawing / Package Dimensions (dimension in mm)

Package 1 (Bare Fiber or Loose Tube)

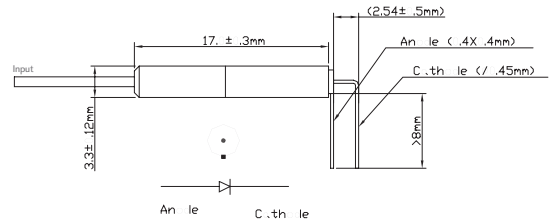


Package 3 (Bare Fiber)



Note: Anode is connected to the metal housing.

Package 4 (900µm Loose Tube)



Note: Anode is connected to the metal housing.

Ordering Information

Oplink can provide a remarkable range of customized optical solutions. For detail, please contact Oplink's OEM design team or account manager for your requirements and ordering information (510) 933-7200.

