

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	λ_{op}	1310±50 or/and 1550±50			nm
Responsivity	@1550nm	R ₁₅₅₀	0.80	0.90	A/W
	@1310nm	R ₁₃₁₀	0.75	0.85	A/W
Polarization Dependent Responsivity	PDR		0.1		dB
Dark Current @V _R =5 V (70°C)	Bandwidth=2.0G	I _d		2.5	nA
	Bandwidth=0.5G	I _d		10	nA
Capacitance @V _R =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

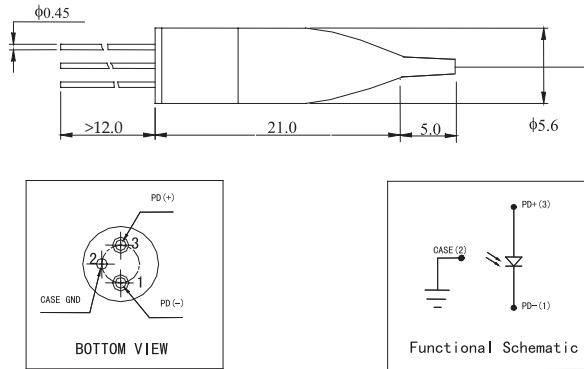
Environmental Conditions

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

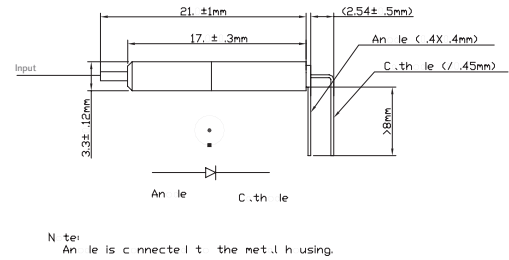
* Not to exceed 0.024 kg water per kg of dry air. Non-condensing Conditions.

Mechanical Drawing / Package Dimensions (dimension in mm)

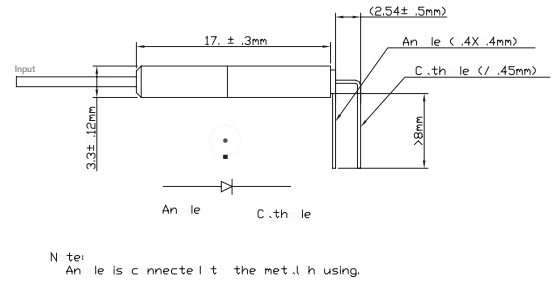
Package 1 (Bare Fiber or Loose Tube)



Package 3 (Bare Fiber)



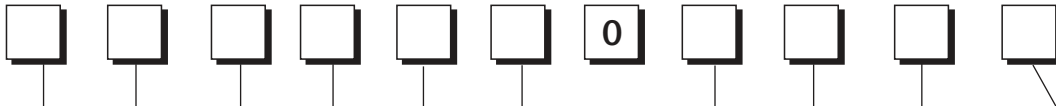
Package 4 (900 μ m Loose Tube)



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.

PIPD



Wavelength

Dual window= DUAL
1310nm= 1310
1550nm= 1550

Bandwidth

0.5G= 05
2.0G= 20

Package & Fiber Type

PI+ 250 μ m bare fiber= 11
PI+ 900 μ m loose tube= 12
P3+ 250 μ m bare fiber= 31
P4+ 900 μ m loose tube= 42

Fiber Length

0.5 meter= H
1.0 meter= I
1.5 meter= 5
2.0 meter= 2

Connector Type

None= 1
FC/PC= 2
FC/SPC= 3
FC/APC= 4
SC/PC= 5
SC/SPC= 6
SC/APC= 7
ST= 8
LC= 9
MU= A