



InGaAs PIN Photodiode

ACP's PTD Series InGaAs Pin Photodiode are sensitive at 1310nm and 1550nm bands. The planar design and dielectric passivation bring superior noise and photoelectronic performance. Our state-of-the-art planar fabrication techniques lead to high quality and reliability.

PERFORMANCE SPECIFICATIONS

FEATURES

- Wide Analog Bandwidth
 - Wide Spectral Response (1000~1650nm)
 - High Quality and Reliability
 - Low Cost
- ### APPLICATION
- DWDM Power Monitoring
 - Gain and Power Monitoring in EDFA
 - OADM
 - OXC
 - High Speed Test Systems
 - Measurement Instrumentation

Parameter	Specifications				
	Symbol	Test Conditions	Min.	Typ.	Max.
Operating Wavelength	λ	-	1000nm		1650nm
Dark Current	ID	VR=5V, Ee=0		0.20nA	0.50nA
Responsivity	Re	VR=5V, λ =1310nm	0.85A/W	0.90A/W	
Responsivity	Re	VR=5V, λ =1550nm	0.90A/W	0.95A/W	
Responsivity	Re	VR=0V, λ =1310nm	0.85A/W		
Responsivity	Re	VR=0V, λ =1550nm	0.90A/W		
Capacitance	c	f=1MHz, Case grounded VR=5V, Ee=0		0.63pF	0.75pF
Operating Voltage	Vopr	-		-5V	-15V
Back Reflection	RL	-			-40dB
Frequency Responsibility	BW	VR=5V, 50 Ω Load with lead, length=6mm, Case open			2GHz
Package Dimension	See "MECHANICAL DIMENSIONS"				

ABSOLUTE MAXIMUM RATINGS(T=25°C)

Parameter	Standard		
	Min.	Typ.	Max.
Type			
Reverse Voltage			5V
Input Optical Power			10dBm
Reverse Current			10mA
Forward Current			10mA
Operating Temperature	-40°C		+85°C
Storage Temperature	-40°C		+85°C
Lead Solder Temperature			+260°C
Lead Solder Duration			10s
Fiber Yield Strength	5N		

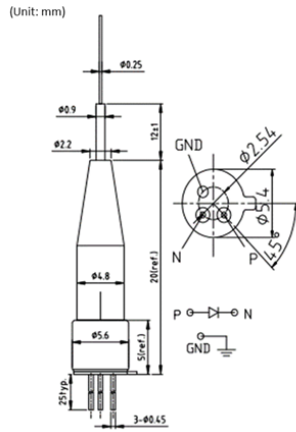
Note: 1. ESD protection is imperative. It is recommended to use grounding straps, anti-static mats and other EDS protective equipment when handling or testing a photodiode device.

2. Please shorten the length of device leads as much as possible.

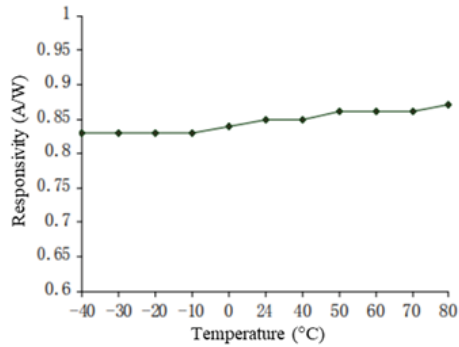
All parameters are measured under 25°C.

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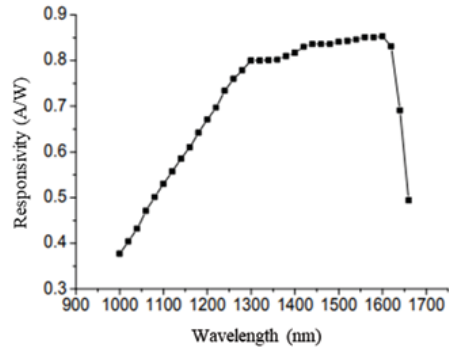
MECHANICAL DIMENSIONS



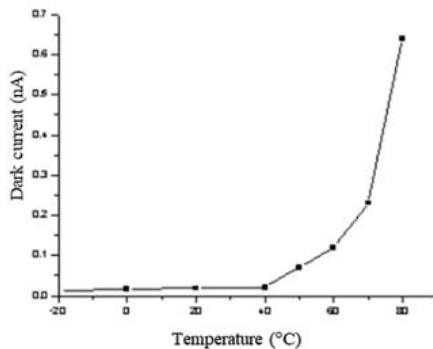
TYPICAL PERFORMANCE CURVES



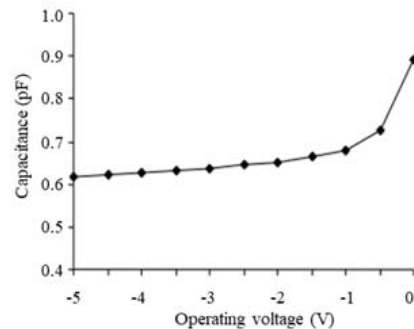
Responsivity-Temperature Curve



Spectrum Curve

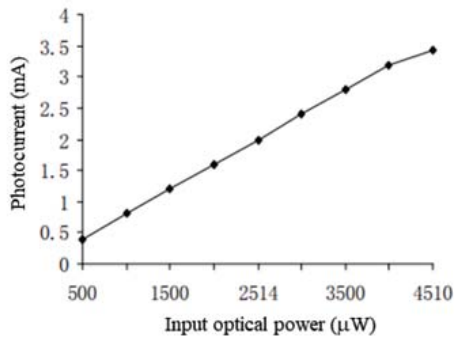


Dark current-Temperature Curve



Capacitance-Voltage Curve

InGaAs PIN Photodiode



Current-Optical power Curve

PORT CONFIGURATIONS



ORDERING INFORMATION

PTD	Operating Wavelength	Mounting style	Fiber Type*	Pigtail Style	Fiber Length	Connector
	35=1000 - 1650nm	1=With mount flange 2=Without mount flange	2=SMF-28 Ultra (G.657.A1) 3=ClearCurve ZBL(G.657.B3)	0=Free space 1=Bare fiber 6=900um tight buffer	00=Free space 05=0.5m 10=1.0m · · · 20=2.0m	0= None 1 = FC/APC 2 = FC/PC 3 = SC/APC 4 = SC/PC 5 = ST 6 = LC/UPC 7 = LC/APC

*1=SMF-28(G.652) is available upon request.