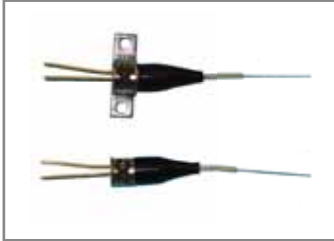


## InGaAs PIN Photodiode



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. All AC Photonics' products are Telcordia qualification tested.

### Key Features

- Wide Analog Bandwidth
- Wide Spectral Response(1000~1650nm)
- High Quality and Reliability
- Low Cost

### Applications

- DWDM Power Monitoring
- Gain and Power Monitoring in EDFA
- OADM
- OXC
- High Speed Test Systems
- Measurement Instrumentation

### Performance Specifications

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.
Operation Wavelength	$\lambda$		1000nm		1650nm
Dark Current	ID	VR=5V, Ee=0		0.2nA	0.5nA
Responsivity	Re	VR=5V, $\lambda=1310\text{nm}$	0.85A/W	0.90A/W	
Responsivity	Re	VR=5V, $\lambda=1550\text{nm}$	0.90A/W	0.95A/W	
Capacitance	c	f=1MHz, case grounded VR=5V, Ee=0,		0.45pF	0.85pF
Operating Voltage	Vopr			-5V	-15V
Back Reflection	RL				-40dB
Frequency Responsibility	BW	VR=5V, 50 $\Omega$ Load with lead, length=6mm, case open	3GHz		

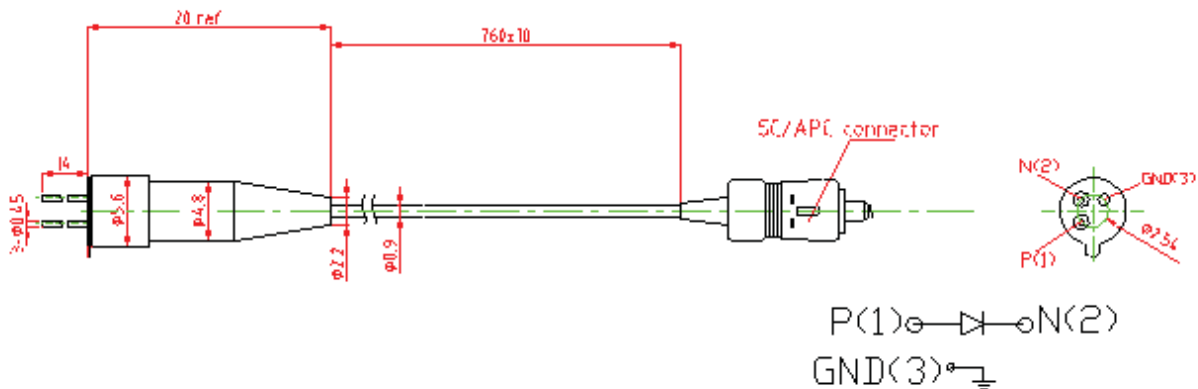
### Absolute Maximum Ratings(T=25°C):

Parameter	Min.	Max.
Reverse Voltage		25V
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		1kgf
Fiber Bend Radius	15mm	
Length of Pigtail	1.0m	1.0m

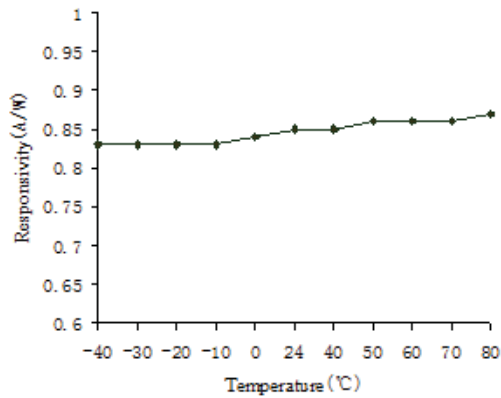
Notes:

- ESD protection is imperative
- Dark Current is under condition of 25 °C

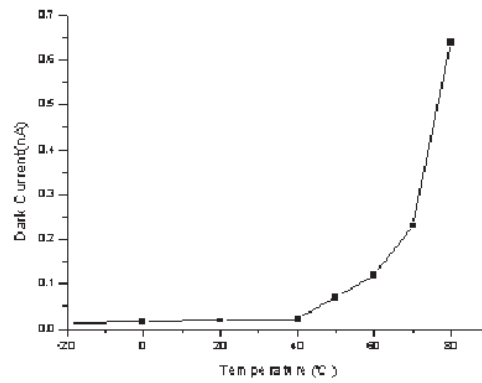
### Mechanical Dimensions



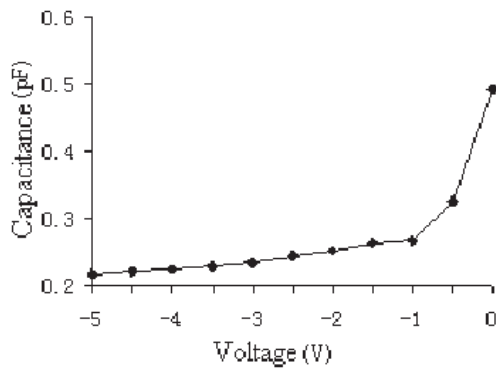
Chart



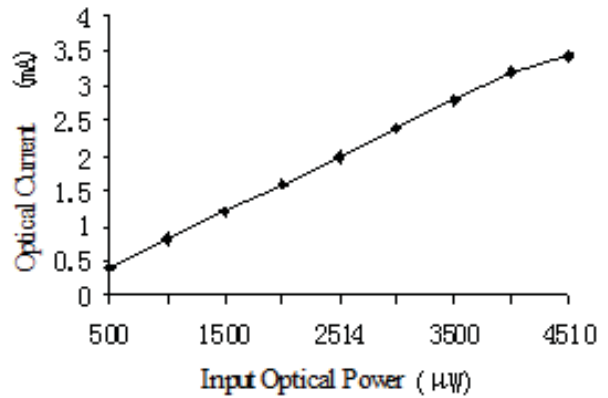
Responsivity-Temperature Curve



Dark Current-Temperature Curve



Capacitance-Voltage Curve



Current-Optical Power Curve

Ordering Information

PTD	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Active Area</b>	<b>Package Size</b>	<b>Mounting Style</b>	<b>Pigtail Style</b>	<b>Fiber Length</b>	<b>In/Out Connector</b>
	0075 = 75um	A = TO-46	1 = With Mount Flange 2 = Without Mount Flange C = Customer Specified 0 = TO Can only	1 = Bare Fiber 2 = 900um Jacket 0 = Free Space	1 = 1.0m 2 = 2.0m 0 = Free Space	0 = None 1 = FC/APC 2 = FC/PC 3 = SC/APC 4 = SC/PC 5 = ST 6 = LC/UPC 7 = LC/APC