

InGaAs Avalanche PHOTODIODE

APD-1150 SERIES

InGaAs APD with Mini-Size TO Package

FEATURES

- ✧ Data Rate up to 2.7 Gbps
- ✧ 0.9 A/W Typical Responsivity
- ✧ Breakdown Voltage: 40V Typical
- ✧ Wide Wavelength Band: 1260 nm to 1620 nm
- ✧ Case Operating Temperature: -40 to 85°C
- ✧ Hermetically Sealed 2-Pin Metal Case
- ✧ 2.4 mm Mini-Size Package

APPLICATIONS

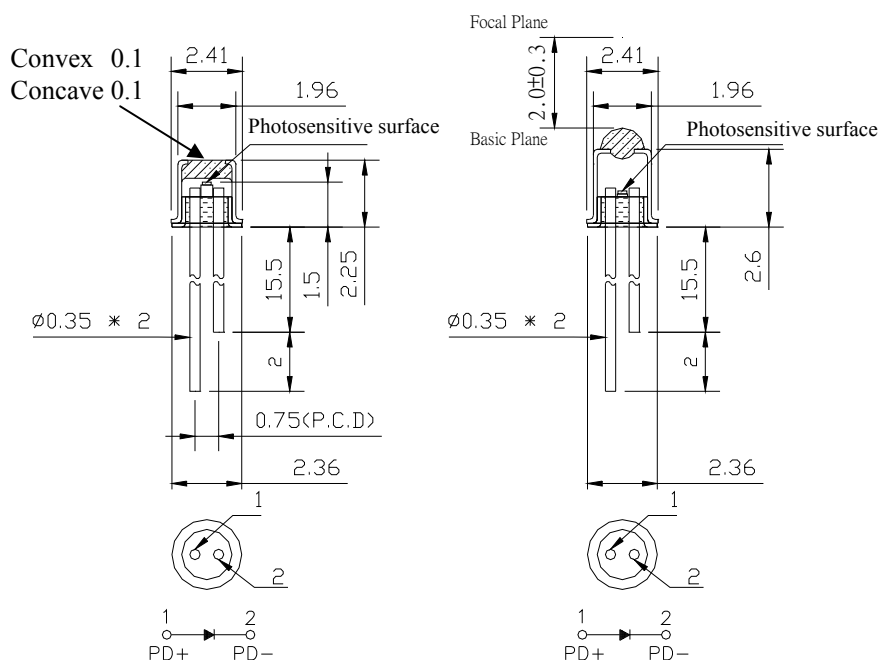
Receiver supports long distance fiber-optics communication systems with performance up to 2.7 Gb/s data rate, -40 to 85 °C operating temperature.

ELECTRICAL AND OPTICAL CHARACTERISTICS (Tc=25°C)						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
	Detection Range	λ	1260	-	1620	nm
V _{BR}	Breakdown Voltage	I _{dark} =10 μ A	35		47	V
V _{OP}	Operating Voltage	Best Sensitivity		V _{BR} -3	V _{BR} -2	V
dV _{BR} /dT	Temperature Coefficient of Breakdown Voltage		0.06	0.07	0.10	V/°C
I _{dark}	Dark Current	V _R = 0.9 V _{BR}		80	100	nA
R	Responsivity	λ =1550nm, M=1	0.85	0.9		A/W
C	Capacitance	V _R = 0.9 V _{BR} , f=1MHz			0.6	pF
BW	Bandwidth	R _L =50 Ω , -3 dB, M=10	2.5			GHz

Absolute Maximum Ratings (Tc=25 °C)				
Symbol	Parameter	Minimum	Maximum	Unit
I _F	APD Forward Current		2	mA
I _R	APD Reverse Current		3	mA
V _R	APD Reverse Voltage		V _{BR}	V
T _{opr}	Operating Temperature	-40	85	°C
T _{stg}	Storage Temperature	-40	85	°C

Stress in excess of the absolute Maximum Ratings may cause permanent damage to the device.

MECHANICAL DIMENSION (mm) and PIN ASSIGNMENT



APD-1150

APD-1155

- Note:** 1. Specifications subject to change without notice.
2. Other PIN assignment is available upon request.

ORDER INFORMATION

Part No.: A P D - 1 1 5 0

Code	Package
0	Flat Window Cap
5	Ball Lens Cap

Revision History

Version	Subject	Release Date
1.0	Initial datasheet	2005/3/1
2.0	Revise mechanical drawing	2009/4/9
