

InGaAs PIN PHOTODIODES

PD-1100 SERIES

FEATURES

- ✧ High responsivity for dual windows at 1310 nm and 1550 nm
- ✧ Low dark current
- ✧ Quick pulse response
- ✧ Hermetically sealed 3-pin metal case
- ✧ Active diameter 75 μm

DESCRIPTION

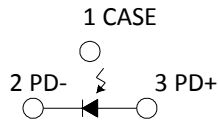
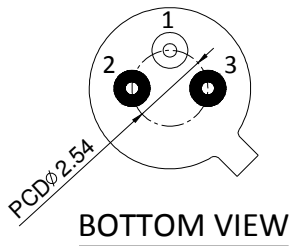
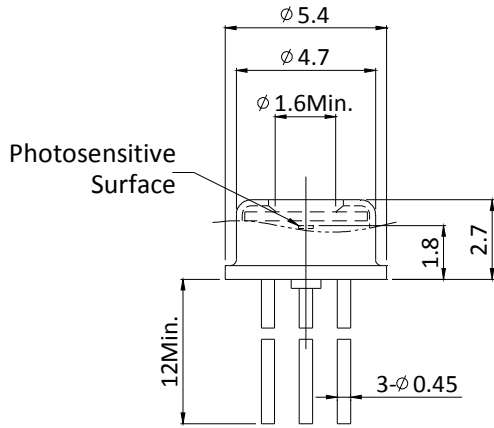
PD-1100 series InGaAs Photodiode are suited to receive the light at the wavelength range from 1100 nm to 1600 nm. With high reliability, PD-1100 series are the best choice for telecom and datacom application.

ELECTRICAL AND OPTICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$)						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
	Active Area			75		μm
	Detection Range		1100		1600	nm
R	Responsivity	$V_R=5\text{V}, \lambda=1300\text{nm}$	0.85			A/W
		$V_R=5\text{V}, \lambda=1550\text{nm}$	0.90			
I_{dark}	Dark Current	$V_R=5\text{V}$		0.3	0.7	nA
C	Capacitance	$V_R=5\text{V}$		0.7	1.0	pF
T_r/T_f	Rise/Fall Time	$V_R=5\text{V}, 10\sim 90\%$			0.3	ns
BW	Bandwidth	$V_R=5\text{V}$	2			GHz

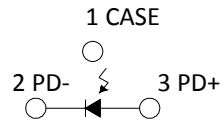
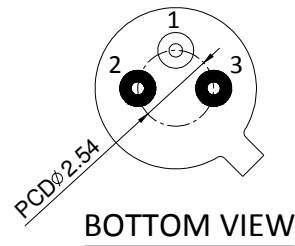
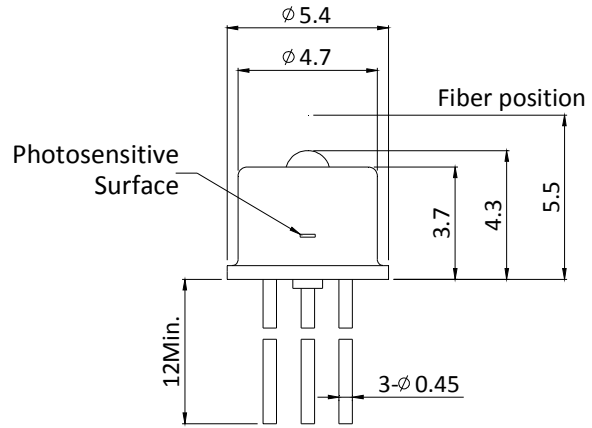
ABSOLUTE MAXIMUM RATINGS ($T_c=25^\circ\text{C}$)			
Symbol	Parameter	Ratings	Unit
P_o	Input Optical Power	10	mW
V_{RD}	Reverse Voltage	20	V
I_{FD}	Forward Current	10	mA
T_{opr}	Operating Temperature	-40~+85	$^\circ\text{C}$
T_{stg}	Storage Temperature	-40~+85	$^\circ\text{C}$

MECHANICAL DIMENSION (mm) and PIN ASSIGNMENT

FLAT WINDOW



BALL LENS



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

ORDER INFORMATION

Part No.: P D - 1 1 0 -

Code	Wavelength
1	1310 / 1550 nm
3	1310 nm
5	1550 nm

Code	Diameter
Blank	75 μ m
100	100 μ m
150	150 μ m

Code	Package
Blank	Flat Window Cap
N	Ball Lens Cap

Code	Package
0	Ball Lens Cap
5	Flat Window Cap

Revision History

Version	Subject	Release Date
1.0	Initial datasheet	2002/12/1
2.0	Revise mechanical drawing	2009/4/9
3.0	Revise mechanical drawing	2015/4/2
