

## 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  $\mu\text{m}$

### DESCRIPTION

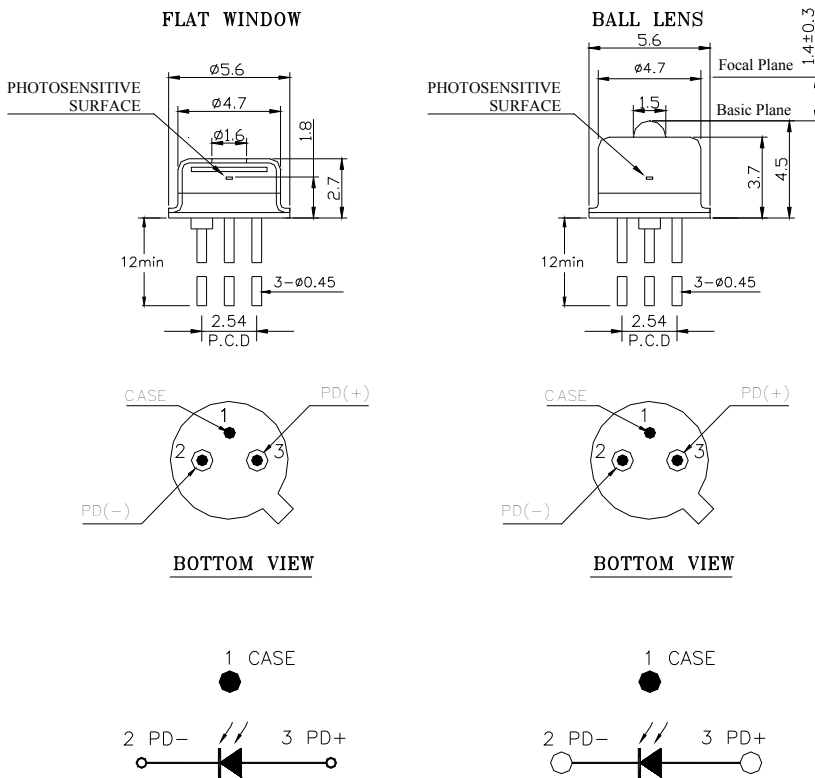
PD-1100 series InGaAs Photodiode are suited to receive the light at the wavelength range from 1100 nm to 1600 nm. With high reliability, PD-1100 series are the best choice for telecom and datacom application.

ELECTRICAL AND OPTICAL CHARACTERISTICS ( $T_c=25^\circ\text{C}$ )						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
	Active Area			75		$\mu\text{m}$
	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			
$I_{\text{dark}}$	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	$^\circ\text{C}$

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## MECHANICAL DIMENSION (mm) and PIN ASSIGNMENT



- 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 μm
100	100 μm
150	150 μm

Code	Package
Blank	Flat Window Cap
N	Ball Lens Cap

Code	Package
0	Ball Lens Cap
5	Flat Window Cap

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## Revision History

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

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