

InGaAs PIN PHOTODIODES

PD-1150-XXX

PIN Photodiode with Mini-Size TO Package

FEATURES

- 2 High Responsivity for Dual windows at 1310 nm and 1550 nm
- 2 Low Dark Current
- 2 Quick Pulse Response
- 2 Hermetically Sealed 2-Pin Metal Case
- 2 Active Diameter 75 μm : PD-1150-075
- 2 Active Diameter 100 μm : PD-1150-100
- 2 Active Diameter 150 μm : PD-1150-150
- 2 2.4 mm Mini-Size Package

DESCRIPTION

PD-1150-XXX series InGaAs Photodiode are suited to receive the light at the wavelength range from 1100 nm to 1620 nm.

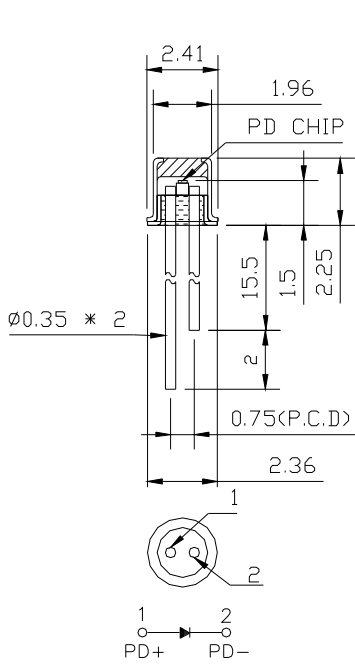
PD-1150-075 / PD-1155-075						
ELECTRICAL AND OPTICAL CHARACTERISTICS ($T_C=25^\circ\text{C}$)						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
	Active Area			75		μm
	Detection Range		1100	1310	1620	nm
R	Responsivity	$V_R=5\text{V}, \lambda=1300\text{nm}$	0.85		-	A/W
		$V_R=5\text{V}, \lambda=1550\text{nm}$	0.90			A/W
I_{dark}	Dark Current	$V_R=5\text{V}$		0.2	0.6	nA
C	Capacitance	$V_R=5\text{V}, f=1\text{MHz}$		0.6	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

PD-1150-100 / PD-1155-100						
ELECTRICAL AND OPTICAL CHARACTERISTICS ($T_C=25^\circ\text{C}$)						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
	Active Area			100		μm
	Detection Range		1100	1310	1620	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			A/W
I_{dark}	Dark Current	$V_R=5\text{V}$		0.3	1.0	nA
C	Capacitance	$V_R=5\text{V}, f=1\text{MHz}$			1.2	pF
T_r/T_f	Rise/Fall Time	$V_R=5\text{V}, 10\sim 90\%$			0.5	ns
BW	Bandwidth	$V_R=5\text{V}$	2			GHz

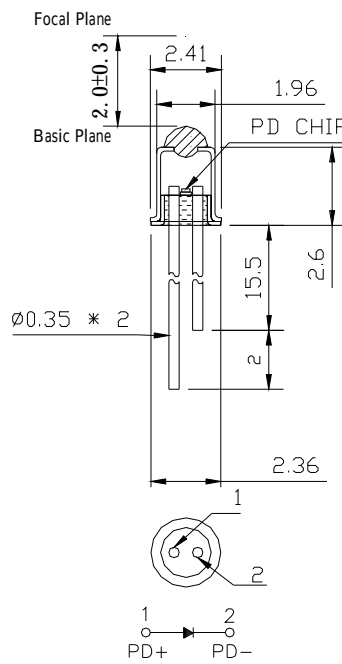
PD-1150-150 / PD-1155-150						
ELECTRICAL AND OPTICAL CHARACTERISTICS (T _C =25°C)						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
	Active Area			150		μm
	Detection Range		1100	1310	1620	nm
R	Responsivity	V _R =5V, λ=1300nm	0.85		-	A/W
		V _R =5V, λ=1550nm	0.90			A/W
I _{dark}	Dark Current	V _R =5V		0.4	1.5	nA
C	Capacitance	V _R =5V, f=1MHz			2	pF
T _r /T _f	Rise/Fall Time	V _R =5V, 10~90%		1		ns
BW	Bandwidth	V _R =5V		1		GHz

ABSOLUTE MAXIMUM RATINGS (T _C =25 °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	°C
T _{stg}	Storage Temperature	-40~+85	°C

MECHANICAL DIMENSION (mm) and PIN ASSIGNMENT



PD-1150-XXX



PD-1155-XXX

Note: 1. Specifications subject to change without notice.

2. Other PIN assignment is available upon request.

ORDER INFORMATION

Part No.: P D - 1 1 5 -

Code	Cap
0	Flat Window
5	Ball Lens

Code	Active area
075	75 μm
100	100 μm
150	150 μm