

**FEATURES**

- ✧ High responsivity at 850 nm
- ✧ Low dark current
- ✧ Quick pulse response
- ✧ Hermetically sealed 3-pin metal case
- ✧ Active diameter 100  $\mu\text{m}$

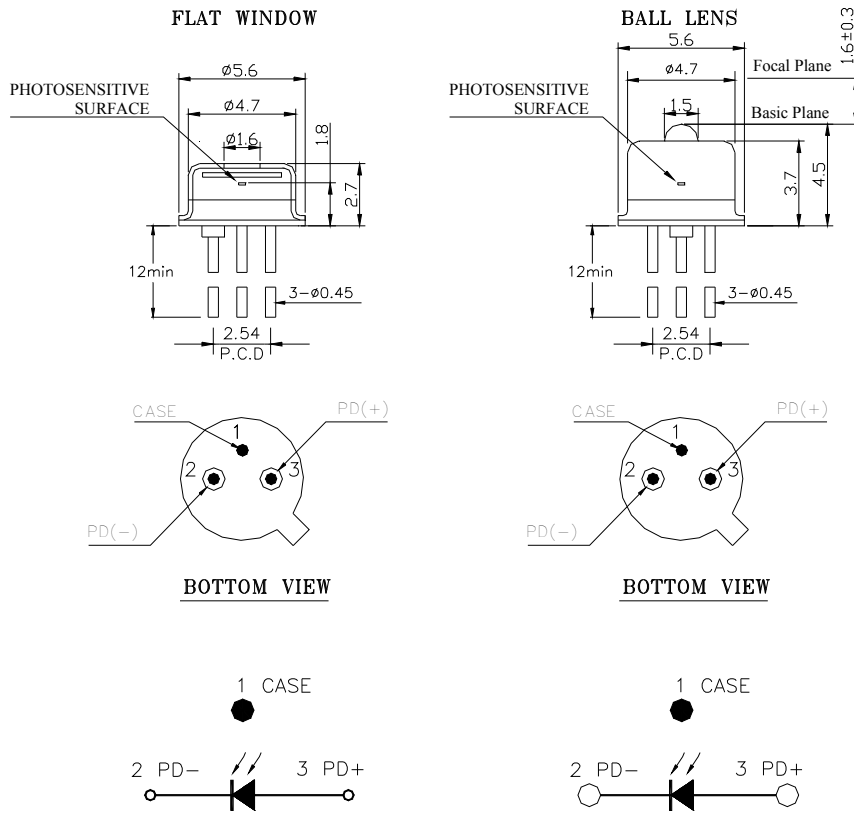
**DESCRIPTION**

PD-8100 series InGaAs Photodiode are suited to receive the light at the wavelength 850 nm. With high reliability, PD-8100 series are the best choice for telecom and datacom application.

ELECTRICAL AND OPTICAL CHARACTERISTICS (T <sub>c</sub> =25°C)						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
	Active Area			100		$\mu\text{m}$
	Detection Range			850		nm
R	Responsivity	V <sub>R</sub> =5V, $\lambda$ =850nm	0.45	0.50	-	A/W
I <sub>dark</sub>	Dark Current	V <sub>R</sub> =5V		0.1	0.7	nA
C	Capacitance	V <sub>R</sub> =5V		0.4	0.7	pF
T <sub>r</sub> /T <sub>f</sub>	Rise/Fall Time	V <sub>R</sub> =5V, 10~90%			0.15	ns
BW	Bandwidth	V <sub>R</sub> =5V	2			GHz

ABSOLUTE MAXIMUM RATINGS (T <sub>c</sub> =25 °C)			
Symbol	Parameter	Ratings	Unit
P <sub>o</sub>	Input Optical Power	2	mW
V <sub>RD</sub>	Reverse Voltage	20	V
I <sub>FD</sub>	Forward Current	2	mA
T <sub>opr</sub>	Operating Temperature	-40~+85	°C
T <sub>stg</sub>	Storage Temperature	-40~+85	°C

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 - 8 1 0

Code	Diameter
0	100 $\mu$ m

Code	Package
0	Ball Lens Cap
5	Flat Window Cap

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Revision History

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