

# ***InGaAs 80PIN Chip***

## **SPECIFICATION**



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## General Description

This 80PIN chip has very low dark current and capacitance. Using this chip an optical receiver with a high sensitivity can be achieved.

### Features

- Operation at 1000~1650nm
- Low dark current
- Low capacitance
- Linear response
- Low cost

### Applications

- Optical power Monitoring
- Optical sensor

## Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	20	V
Reverse current	$I_R$	10	mA
Operating temperature range	$T_{OPR}$	-40 to +85	°C
Storage temperature range	$T_{STG}$	-40 to +85	°C

Table 1. Absolute Maximum Ratings

## Electro-Optical Characteristics (Tc=25°C)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Dark current	$I_D$	$V_R = 5\text{ V}$			1	nA
Capacitance	$C_{PD}$	$V_R = 5\text{ V}$		1		pF
Responsivity	R	$V_R = 5\text{ V} (@1550\text{nm})$	0.9			A/W
Operating range	$\lambda$	-	1.0	-	1.65	$\mu\text{m}$

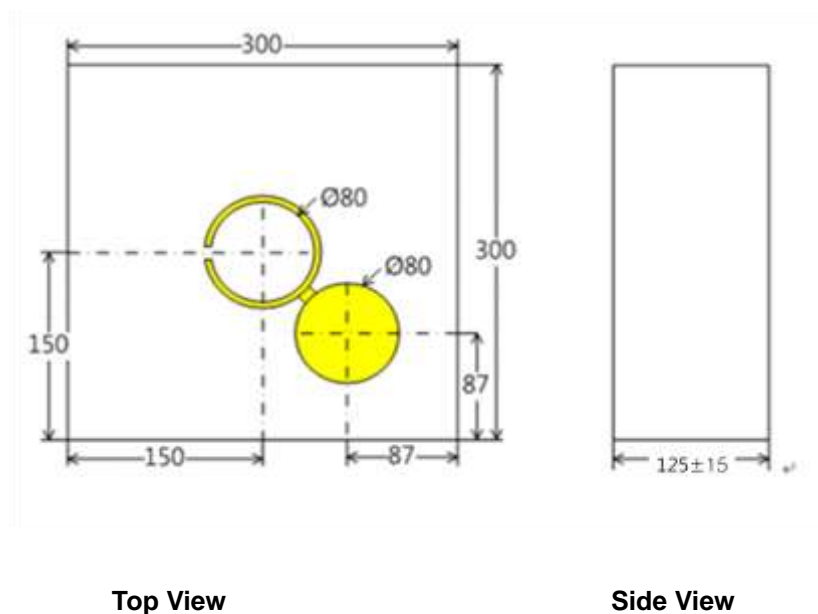
Table 2. Electro Characteristics

## Structure

### Dimension Parameter

Parameter	Symbol	Typ.	Unit
Light receiving area diameter	D	80	$\mu\text{m}$
Chip size	-	300×300	$\mu\text{m}^2$
Bonding pad diameter	-	80	$\mu\text{m}$
Chip thickness	t	125 ± 15	$\mu\text{m}$

## Dimension

(unit:  $\mu\text{m}$ )

Top View

Side View

## Other Requirements

### Precautions for use

- 1) This device is susceptible to damage as a result of ESD (electrostatic discharge). Use of ground straps, anti static mats, and other standard ESD protective equipment is recommended when handling or testing an InGaAs PIN/APD or any other junction photodiode. Soldering temperature of the leads should not exceed 350°C for more than 3 seconds.

### Ordering Information- PD CHIP

