

## PD1300-35D00-I InGaAs PIN-PD

PD1300-35D00-I is InGaAs PIN-photodiode featuring excellent responsibility and high photocurrent for near infrared. This PIN-photodiode consists of a large chip with 0.35x0.35mm active area mounted on the TO-18 stem and is sealed by epoxy resin lens. These devices are designed to be easy of setting up optically with a wide angle of half sensitivity of  $\pm 60$ degrees.

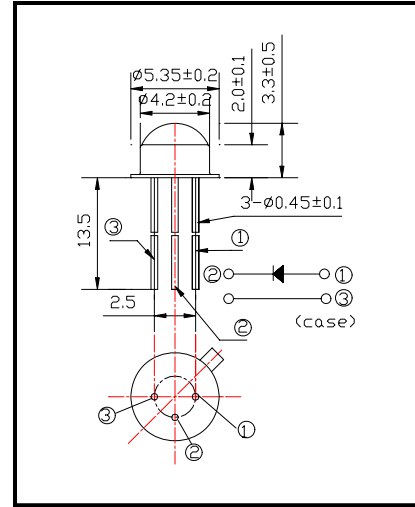
### ◆ Features

- 1) High Reliability
- 2) High Response

### ◆ Specifications

- 1) Product Name InGaAs PIN Photo-Diode
- 2) Type No. PD1300-35D00-I
- 3) Chip
  - (1) Active Area 0.35mmx0.35mm
- 4) Package
  - (1) Type TO-18 (3pins)
  - (2) Lens Epoxy Resin Lens
  - (2) Cap Gold Plated

### ◆ Outer dimension (Unit:mm)



### ◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	10	V
Operating Temperature	$T_{OPR}$	-20 ~ +90	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-30 ~ +100	$^{\circ}\text{C}$
Soldering Temperature	$T_{SOL}$	260	$^{\circ}\text{C}$

‡Pulse Soldering condition: Soldering condition must be completed within 2 seconds at 240 $^{\circ}\text{C}$

### ◆ Electro-Optical Characteristics [25 $^{\circ}\text{C}$ ]

Item	Symbol	Condition	Minimum	Typical	Maximum	unit
Photo Responsivity	$R_E$	$V_R=0\text{V}, \lambda_P=1300\text{nm}$		0.9		A/W
Photo Current	$I_L$	$V_R=0\text{V}, \lambda_P=1300\text{nm}$	10			$\mu\text{A}(\pm 1)$
Dark Current	$I_D$	$V_R=1\text{V}$			100	nA
Spectral Responsivity (Peak)	$\lambda_P$	$V_R=0\text{V}$	1000		1600	nm
Half Angle of Sensitivity	$\theta_{1/2}$	$V_R=0\text{V}$		$\pm 60$		deg.
Total Capacitance	$C_T$	$f=1\text{MHz}, V_R=1\text{V}$		20		pF
Rise/Fall Time(10%~90%)	$t_r$	$R_L=1\text{K}\Omega, V_R=1\text{V}$		10		ns
	$t_f$			5		ns

‡Measured by Epitex's calibrated tool