

Lead (Pb) Free Product RoHS compliant

# PD1450-35T54 InGaAs PIN-PD

PD1450-35T54 is InGaAs PIN-photodiode. This PIN-photodiode consists of a large chip with 0.35x0.35mm active area mounted on the TO-18 stem and is hermetical sealed by metal can with flat lens.

These devices are designed to be easy of setting up optically with a wide angle of half sensitivity of  $\pm 29^\circ$ .

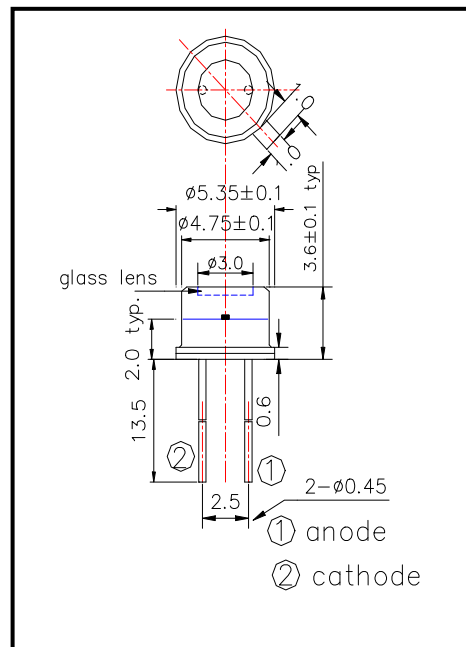
◆ Features

- 1) High Reliability
- 2) High Response

◆ Specifications

- 1) Product Name InGaAs PIN Photo-Diode
- 2) Type No. PD1450-35T54
- 3) Chip
  - (1) Active Area 0.35mmx0.35mm
- 4) Package
  - (1) Type TO-18
  - (2) Lens Glass Flat Lens (Φ3.0)
  - (2) Cap Gold Plated

◆ Outer dimension (Unit:mm)



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	15	V
Operating Temperature	$T_{OPR}$	-20 ~ +90	°C
Storage Temperature	$T_{STG}$	-30 ~ +100	°C
Soldering Temperature	$T_{SOL}$	265	°C

‡Soldering condition: Soldering condition must be completed within 3 seconds at 265°C

◆ Electro-Optical Characteristics [25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	unit
Photo Responsivity	$R_E$	$V_R=0V, \lambda_P=1450nm$		0.9		A/W
Photo Current	$I_L$	$V_R=0V, \lambda_P=1450nm$	15	28		$\mu A(\pm 1)$
Dark Current	$I_D$	$V_R=3V$			100	nA
Spectral Responsivity (Peak)	$\lambda_P$	$V_R=0V$	1000		1600	nm
Half Angle of Sensitivity	$\theta_{1/2}$	$V_R=0V$		$\pm 29$		deg.
Total Capacitance	$C_T$	$f=1MHz, V_R=0V$		50		pF
		$z, V_R=5V$		15		
Rise/FallTime(10%~90%)	$t_r$	$R_L=1K\Omega, V_R=1V$		20		ns
	$t_f$			20		

‡Measured by Epitex's calibrated tool