

# Data Sheet

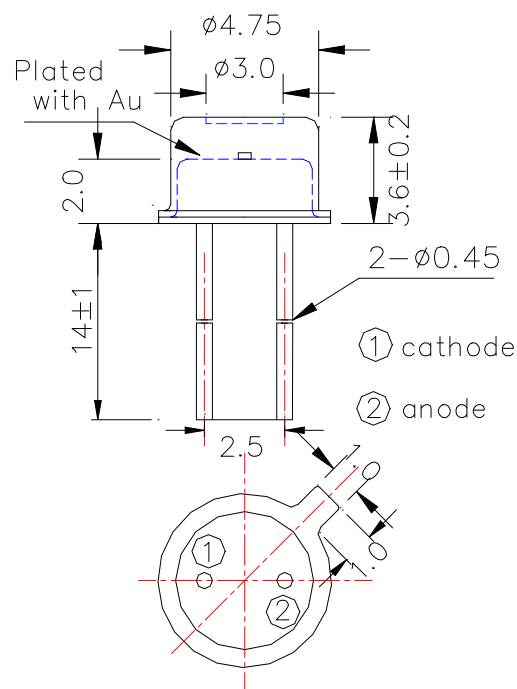
PRELIMINARY

## PD1450T-35T54

Stem type Photo-Diode

USHIO

### Outline and Internal Circuit



(Unit : mm)

### Features

- Chip Material : InGaAs
- Chip Dimension : 380um \* 380um
- Number of Chips : 1pce
- Stem: TO-18 type
- Lens : Flat Glass
- Cap : Gold Plated

### Application

### Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Reverse Breakdown Voltage	V(VR)R	20	V
Operating Temperature	T <sub>opr</sub>	-40 ~ +100	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +100	°C
Soldering Temperature	T <sub>SOL</sub>	250	°C

‡Soldering condition: Soldering condition must be completed within 5 seconds at 250°C and is allowed in the area apart 3mm from the bottom of the diode.

### Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition	
Photo Responsivity	RE		0.95		A/W	VR=5V	λ <sub>p</sub> =1300nm
			1.00				λ <sub>p</sub> =1550nm
Photo Current	IL		20		uA	VR=0V λ <sub>p</sub> =1450nm	
Dark Current	ID			1	nA	VR=5V	
Spectral Responsivity (Peak)	λ <sub>p</sub>		1450		nm	VR=0V	
Half Angle of Sensitivity	θ1/2		±29		deg.	VR=0V	
Total Capacitance	CT		4.5		pF	VR=5V f=1MHz	

‡ Measured by UOS's calibrated tool.

## Disclaimer

Product specifications and data shown in this product catalog are subject to change without notice for the purposes of improving product performance, reliability, design, or otherwise.

Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements.

Product data and parameters may vary by user application and over time.

Products shown in this catalog are intended to be used for general electronic equipment. Products are not guaranteed for applications where product malfunction or failure may cause personal injury or death, including but not limited to life-supporting / saving devices, medical devices, safety devices, airplanes, aerospace equipment, automobiles, traffic control systems, and nuclear reactor control systems.

\*Effective July 2016, Ushio Epitex Inc. is now USHIO OPTO SEMICONDUCTORS, INC.

Data Sheet PD1450T-35T54

2018.03