

# Data Sheet

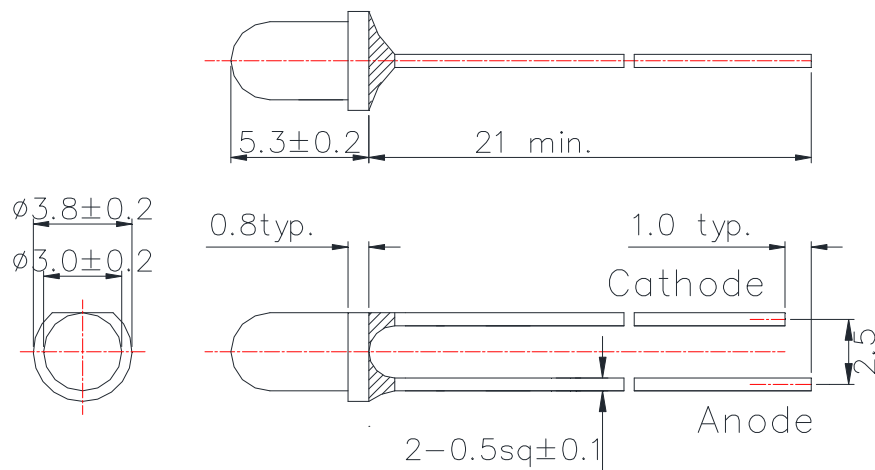
PRELIMINARY

## PD006-33

Mold type PIN-Photodiode

USHIO

### Outline and Internal Circuit



(Unit : mm)

### Features

- Chip Material : Si
- Chip Dimension : 600um \* 600um
- Active Area : 440um \* 440um
- Number of Chips : 1pce
- Package Type :  $\phi 3$ mm clear molding
- Lead Frame : Soldered (Lead Free)
- Lens : Epoxy Resin

### Application

## Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Reverse Breakdown Voltage	V(VR)R	170	V
Operating Temperature	Topr	-40 ~ +100	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Soldering Temperature	TSOL	265	°C

‡Soldering condition: Soldering condition must be completed within 3 seconds at 265°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 Current	IL		12		uA	VR=10V L=1000Lx
Dark Current	ID			10	nA	VR=10V
Open Circuit Voltage	VOC		390		mV	VR=10V L=1000Lx
Spectral Responsivity (Peak)	$\lambda_p$		900		nm	VR=0V
Half Angle of Sensitivity	$\theta_{1/2}$		±25		deg.	VR=0V
Total Capacitance	CT		6		pF	VR=10V f=1MHz
Rise/Fall Time(10% ~ 90%)	tr		6		ns	RL=1kΩ VR=10V
	tf		6		ns	

‡ 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.