

Data Sheet

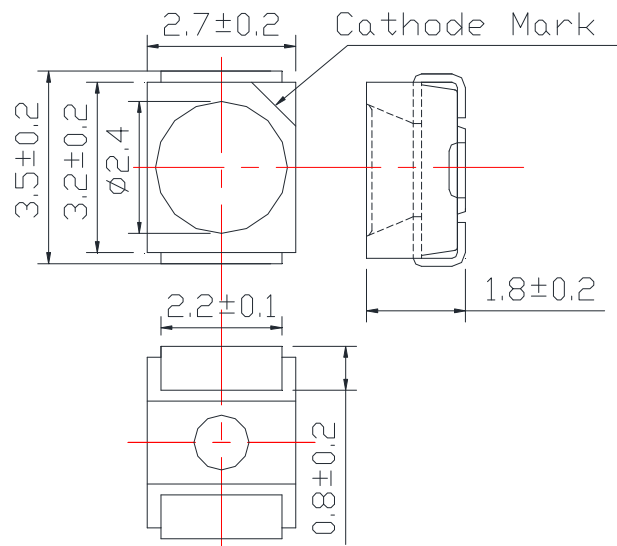
PRELIMINARY

PD1450T-SMT

InGaAs Photo-Diode

USHIO

Outline and Internal Circuit



(Unit : mm)

Features

- Chip Material : InGaAs
- Chip Dimension : $380\mu\text{m} * 380\mu\text{m}$
- Number of Chips : 1pce
- Lead Frame Die : Silver Plated on Copper
- Package Resin : PA6T
- Lens : Silicone or Epoxy Resin

Application

Absolute Maximum Ratings (Tc=25°C)

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

‡Pulse Forward Current condition : Duty 1% and Pulse Width=10us.

‡Soldering condition : Soldering condition must be completed with 5 seconds at 250°C.

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 _p =1300nm
			1.00				λ _p =1550nm
Photo Current	IL		10		uA	VR=0V λ _p =1450nm	
Dark Current	ID			1	nA	VR=5V	
Spectral Responsivity (Peak)	λ _p		1450		nm	VR=0V	
Half Angle of Sensitivity	θ _{1/2}		±58		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.