# 0.5mm Ultra low dark current InGaAs PIN photodiode

V4.1LIPD-004 20-10-01

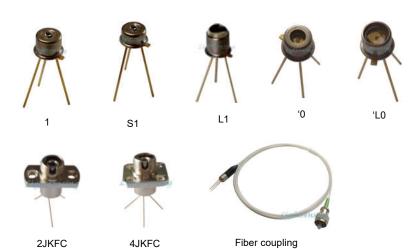
## Model: LSIPD-UL0.5

#### Features:

- High reliability, Ultra low dark current
- Top illumination Planar PIN PD
- Active diameter 0.5mm
- TO46 Can with receptacle or fiber coupling

# **Applications:**

- Optical sensor
- Optical power meter
- Industrial automatic control
- Science analysis and experiment
- Space light detect equipment
- Response spectrum testing



# Absolute maximum ratings:

parameter	symbol	value	unit
Operating temperature	Тор	-40~+85	$^{\circ}\! \mathbb{C}$
Storage temperature	Tstg	-40~+100	℃
Reverse voltage	Vr	10	V
Soldering temperature(time)	Ts (10s)	260	$^{\circ}$

Electrical and optical characteristics:(T=25°C)

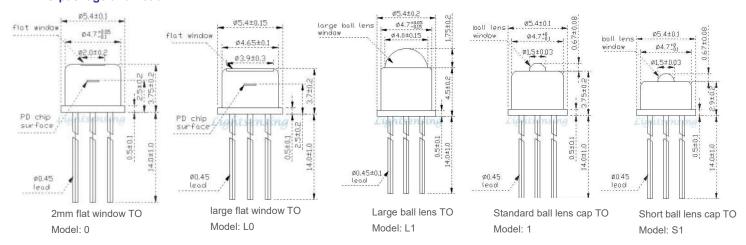
parameter	symbol	unit	Value (typ.)	
Active diameter	Ф	mm	0.5	
Spectral range	λ	nm	800-1700	
Responsivity	Re(Vr=0V,λ=1310nm)	mA/mW	0.85	
	Re(Vr=0V,λ=1550nm)	mA/mW	0.90	
Response time	Tr (R <sub>L</sub> =50Ω,Vr=5V)	ns	3	
Dark current	Id(Vr=0V)	pA	3	
	Id(Vr=5V)	pA	35	
Reverse Breakdown voltage	V <sub>BR</sub> (Id=10uA)	V	30	
Total capacitance	Cj (f=1MHz, Vr=0V)	pF	1000	
	Cj (f=1MHz, Vr=5V)	pF	19	
Saturated Optical Power	Ps(Vr =5V)	mW	8	
Reverse operating voltage	Vr	V	0-5	
Shunt resistance	Rsh (Vr=10mV)	GΩ	3	
package	TO46 Can or with receptacle	TO46 Can or with receptacle or fiber coupling		

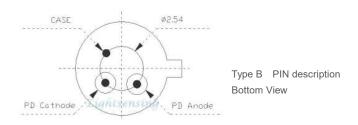
NOTICE: The above product specifications are subject to change without notice.

# The typical Responsivity curve



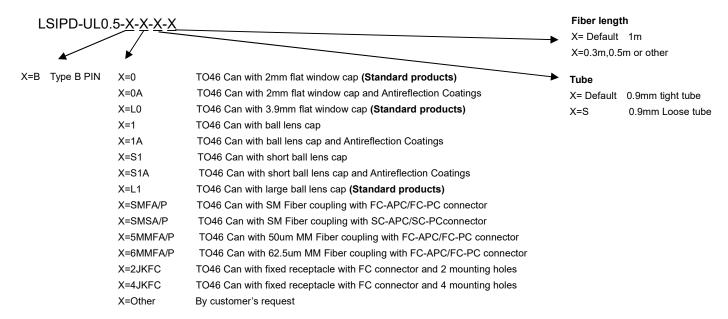
## TO package and Lead





Note: For more information on dimension, please contact us.

### **Order information**



# **The Cautions**

- 1: The above product specifications are subject to change without notice.
- 2: The suitable ESD protecting mersures are recommend in storage, transporting and using.
- 3: The fiber bending radius no less than 20mm for avoiding fiber damaged ,Be sure the fiber coupling facet is clean before connecting it to opto-circuit.