

## 0.8mm UV Silicon PIN photodiode

Model: LSSPD-U0.8

V4.2UVPD-001 22-01-01

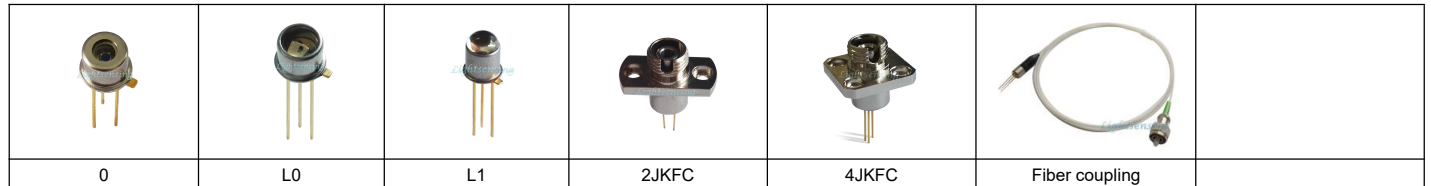
### 1.Features

- High reliability, Ultra low dark current
- 200-1100nm spectral range
- Active diameter 0.8x0.8mm
- Hermetic TO46 Can with UV glass window or with receptacle or with fiber coupling

### 2.Applications

- Optical sensor
- Environmental protection
- Fluorescence detector
- Medical equipment
- Response spectrum testing
- Optical power meter

### 3.Picture



### 4.The absolute values

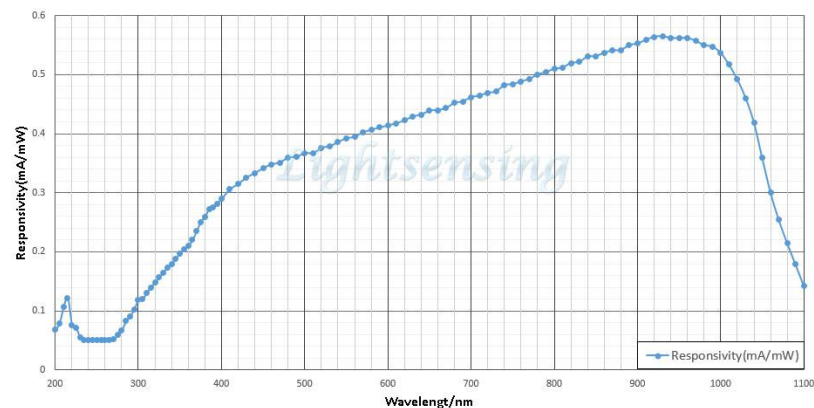
parameter	symbol	value	unit
Operating temperature	Top	-40~+85	°C
Storage temperature	Tstg	-40~+100	°C
Reverse voltage	Vr	20	V
Soldering temperature(time)	Ts (10s)	260	°C

### 5.The opto-electronic characteristics (T=22±3°C)

parameter	symbol	unit	Value (typ.)
Active diameter	$\Phi$	mm	0.8x0.8
Spectral range	$\lambda$	nm	200-1100
Responsivity	Re(Vr=5V, $\lambda$ =200nm)	mA/mW	0.08
	Re(Vr=5V, $\lambda$ =405nm)	mA/mW	0.28
	Re(Vr=5V, $\lambda$ =650nm)	mA/mW	0.43
	Re(Vr=5V, $\lambda$ =905nm)	mA/mW	0.55
	Re(Vr=5V, $\lambda$ =1064nm)	mA/mW	0.22
Response time	Tr (RL=50 $\Omega$ , Vr=5V)	ns	40
Dark current	Id(Vr=0V)	pA	1
	Id(Vr=5V)	pA	100
Reverse Breakdown voltage	V <sub>BR</sub> (Id=10uA)	V	40
Total capacitance	Cj (f=1MHz, Vr=0V)	pF	180
	Cj (f=1MHz, Vr=5V)	pF	25
Saturated optical Power	Ps(Vr=5V)	mW	15
Reverse operating voltage	Vr	V	0-15
Shunt resistance	Rsh (Vr=10mV)	G $\Omega$	10
Package	Hermetic TO46 Can with UV glass window or with receptacle or fiber coupling		

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

### The typical Responsivity curve



### 6. The package Dimensions and Lead

0	L0	L1	3P Type B PIN Bottom View	3PC Type C PIN Bottom View
0	L0	L1	2P PIN Bottom View	

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

### 7. Order information

TO46 Can product order information: LS=Lightensing				
LS	SPD	-U0.8	-2P	-L0
	PD type	Active Area	PIN	Cap type
	SPD= Si PD	0.8=0.8x0.8mm	2P=2 PIN 3P=3 PIN B Type 3PC=3 PIN C Type Other	0=2mm flat UV glass window nickel-plated cap L0=3.9mm flat glass UV window nickel-plated cap L1=large ball UV glass lens nickel-plated cap Other

Receptacle product order information: LS=Lightensing				
LS	SPD	-U0.8	-3P	-2JKFC
	PD type	Active Area	PIN	Receptacle type
	SPD= Si PD	0.8=0.8x0.8mm	2P=2 PIN 3P=3 PIN B Type 3PC=3 PIN C Type Other	2JKFC=receptacle with FC connector and 2 mounting holes 4JKFC=receptacle with FC connector and 4 mounting holes Other

Fiber coupling product order information: LS=Lightensing; Def=Default;								
LS	SPD	-U0.8	-3P	-SM	FA	-	-	-
	PD type	Active Area	PIN	Fiber type	Fiber connector	Fiber tube	Fiber length	
	SPD= Si PD	0.8=0.8x0.8mm	2P=2 PIN 3P=3 PIN B Type 3PC=3 PIN C Type Other	SM=9um SM 5MM=50um MM 6MM=62.5um MM Other	FA=FC/APC FP=FC/PC SA=SC/APC SP=SC/PC Other	Def=0.9mm tight S=0.9mm Loose Other	Def=1 meter 0.3m=0.3 meter 0.5m=0.5 meter Other	

### 8. The cautions!

- 1: The above product specifications are subject to change without notice.
- 2: The suitable ESD protecting measures 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.

