

# 1.2mm Silicon PIN photodiode

V4.1SWPD-004 21-10-01

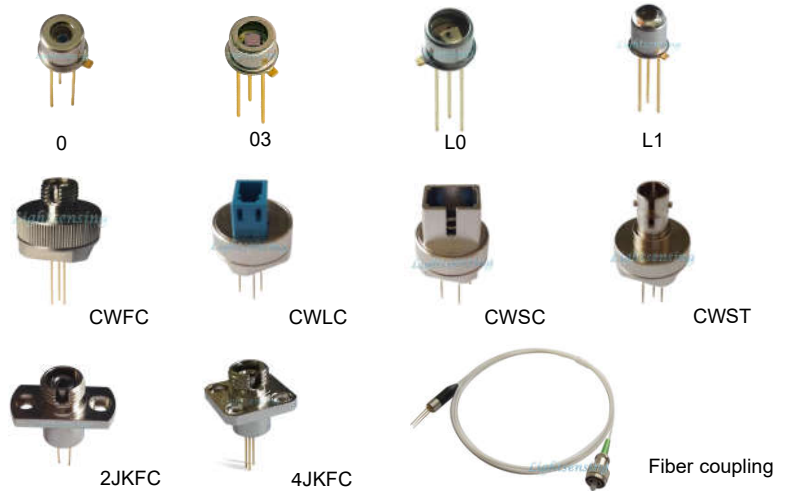
**Model: LSSPD-1.2**

**Features:**

- High reliability, low dark current
- 400-1100nm spectral range
- 1064nm responsivity up to 0.27mA/mW
- Active diameter 1.2x1.2mm
- Hermetic TO46 Can or with receptacle or with fiber coupling

**Applications:**

- Optical sensor and Optical power meter
- Laser finding range and laser radar
- Industrial automatic control
- IR/ Laser light Monitoring
- Fluorescence detector
- Medical equipment



**Absolute maximum ratings:**

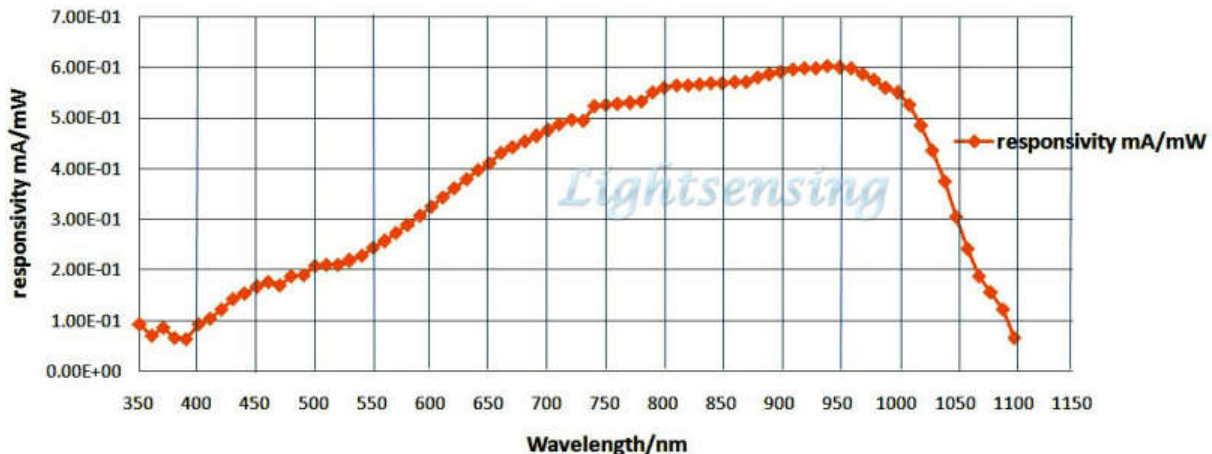
parameter	symbol	value	unit
Operating temperature	Top	-40~+85	°C
Storage temperature	Tstg	-40~+100	°C
Reverse voltage	Vr	15	V
Soldering temperature(time)	Ts(10s)	260	°C

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

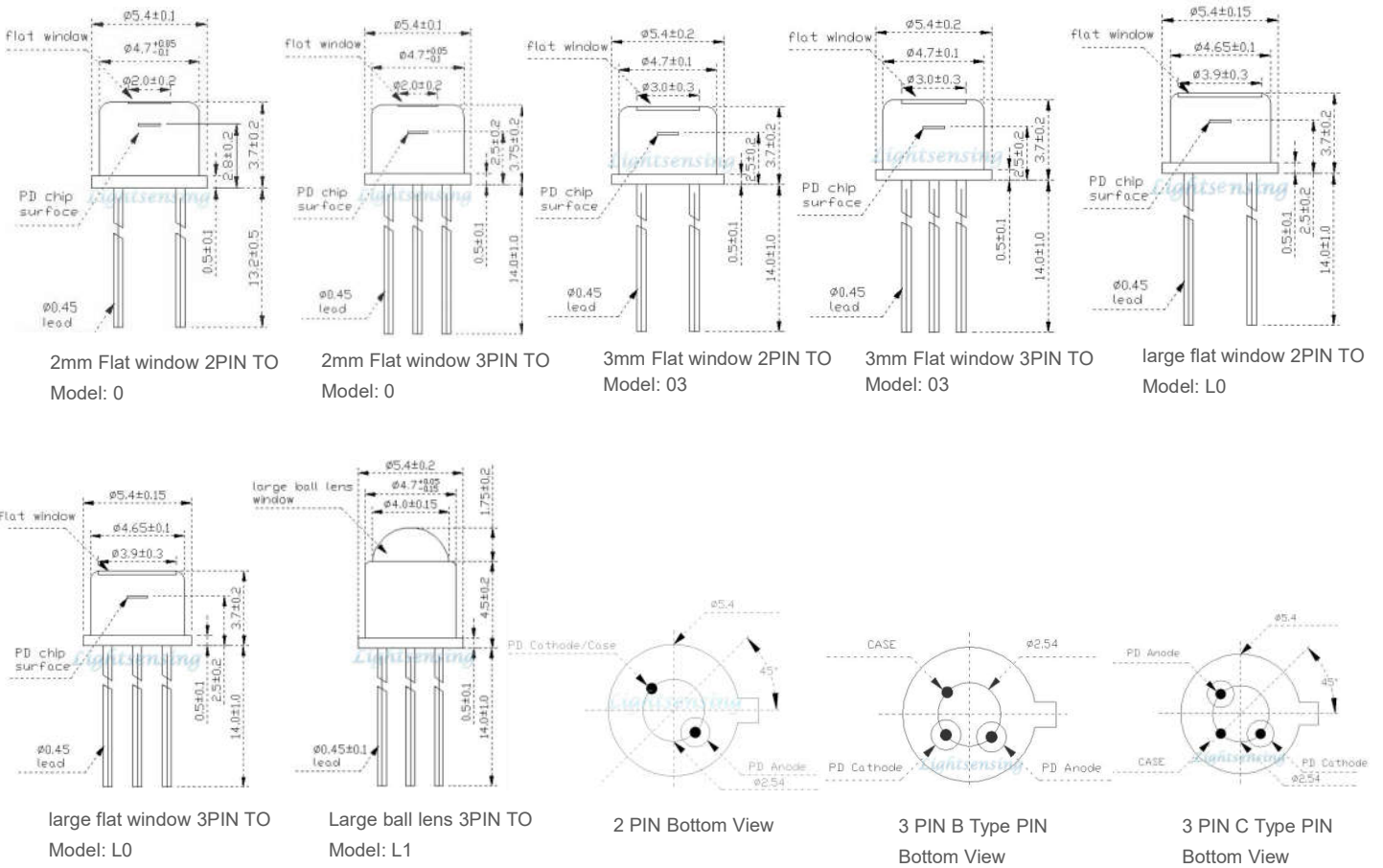
parameter	symbol	unit	Value(Typ.)
Active diameter	Φ	mm	1.2x1.2
Spectral range	λ	nm	400-1100
Responsivity	Re(Vr=5V,λ=405nm)	mA/mW	0.15
	Re(Vr=5V,λ=650nm)	mA/mW	0.30
	Re(Vr=5V,λ=850nm)	mA/mW	0.55
	Re(Vr=5V,λ=1064nm)	mA/mW	0.27
Response time	Tr (RL=50Ω, Vr=5V)	ns	10
Dark current	Id(Vr=0V)	pA	0.5
	Id(Vr=5V)	pA	150
Reverse Breakdown voltage	VBR (Id=10uA)	V	80
Total capacitance	Cj (f=1MHz, Vr=0V)	pF	500
	Cj (f=1MHz, Vr=5V)	pF	6
Saturated Optical Power	Ps(Vr=0V)	mW	5
	Ps(Vr=5V)	mW	15
Reverse operating voltage	Vr	V	0-10
Shunt resistance	Rsh (Vr=10mV)	GΩ	20
Package	Hermetic TO46 Can or with receptacle or with 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

LSSPD-1.2-X-X-X-X

#### Fiber length

X= Default 1m  
X=0.3m,0.5m or other

#### Tube

X= Default 0.9mm tight tube  
X=S 0.9mm Loose tube

X=2P	2 PIN(Standard products)	X=0	TO46 Can with 2mm Flat window nickel-plated cap(Standard products)
X=3P	3 PIN B Type	X=03	TO46 Can with 3mm Flat window nickel-plated cap(Standard products)
X=3PC	3 PIN C Type(Standard products)	X=L0	TO46 Can with 3.9mm flat window nickel-plated cap
		X=L1	TO46 Can with large ball lens nickel-plated cap
		X=SMFA/P	TO46 Can with SM Fiber coupling with FC-APC/FC-PC connector
		X=SMSA/P	TO46 Can with SM Fiber coupling with SC-APC/SC-PCconnector
		X=5MMFA/P	TO46 Can with 50um MM Fiber coupling with FC-APC/FC-PC connector
		X=6MMFA/P	TO46 Can with 62.5um MM Fiber coupling with FC-APC/FC-PC connector
		X=10MMFA/P	TO46 Can with 105um MM Fiber coupling with FC-APC/FC-PC connector
		X=20MMFA/P	TO46 Can with 200um MM Fiber coupling with FC-APC/FC-PC connector
		X=CWFC	TO46 Can with replaceable receptacle with FC connector
		X=CWSC	TO46 Can with replaceable receptacle with SC connector
		X=CWLC	TO46 Can with replaceable receptacle with LC connector
		X=CWST	TO46 Can with replaceable receptacle with ST connector
		X=2JKFC	TO46 Can with fixed receptacle with FC connector and 2 mounting holes
		X=4JKFC	TO46 Can with fixed receptacle with FC connector and 4 mounting holes
		X=Other	By customer's request

### The cautions

- 1: The above product specifications are subject to change without notice.
- 2: The suitable ESD protection is required in storage, transportation 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.

