

400nm-1700nm 1mm InGaAs PIN Photodiode

V4. IVPD-003 20-10-01

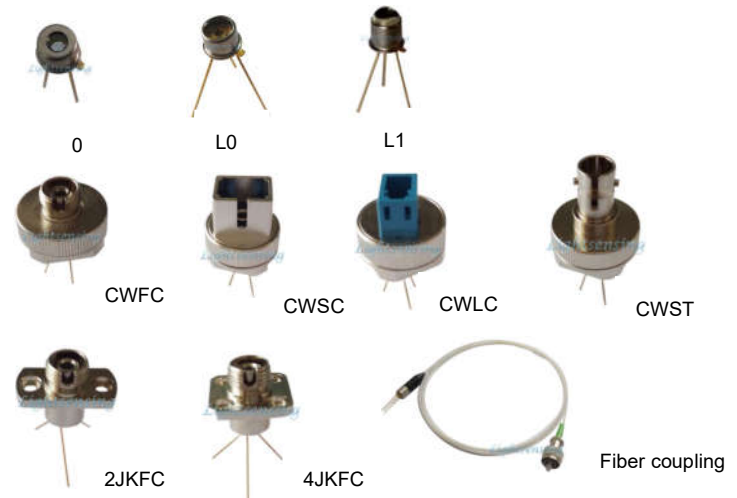
Model: LSIPD-1S

Features:

- High reliability, low dark current
- Active diameter 1mm
- 400-1700nm wide wavelength range
- Hermetic package TO46 Can or with receptacle or fiber coupling

Applications:

- Optical sensor, Temperature sensing
- Covert IR sensing, Spectrography
- Medical and Chemical analysis
- Optical power meter, Space light detect equipment
- Light Detection , Industrial automatic control
- Science analysis and experiment
- Space light detect equipment



Absolute maximum ratings:

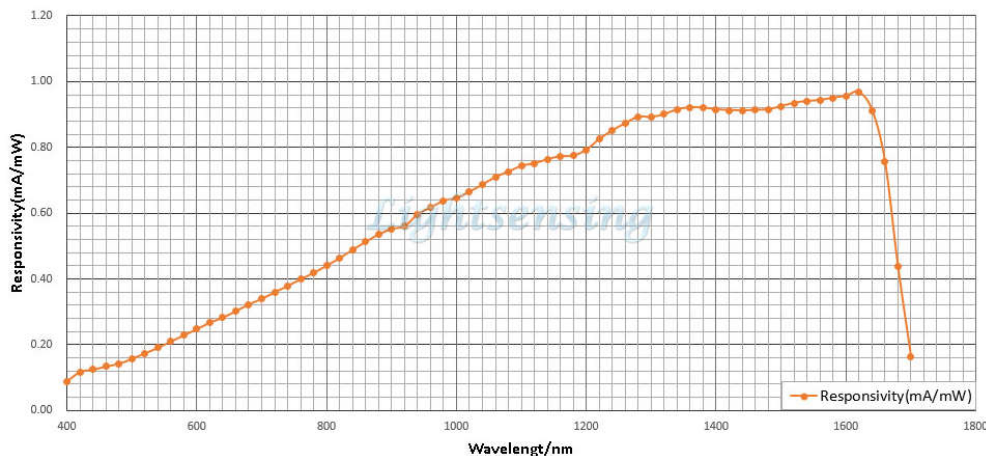
parameter	symbol	value	unit
Operating temperature	Top	-40~+85	°C
Storage temperature	Tstg	-40~+100	°C
Reverse voltage	Vr	10	V
Soldering temperature(time)	Ts (10s)	260	°C

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

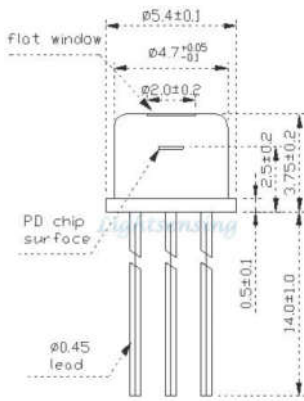
parameter	symbol	unit	Value (typ.)
Active diameter	Φ	mm	1
Spectral range	λ	nm	400-1700
Responsivity	Re(Vr=0V, λ =405nm)	mA/mW	0.12
	Re(Vr=0V, λ =650nm)	mA/mW	0.35
	Re(Vr=0V, λ =850nm)	mA/mW	0.48
	Re(Vr=0V, λ =1550nm)	mA/mW	0.90
Response time	Tr (RL=50 Ω , Vr=5V)	ns	5
Dark current	Id(Vr=0V)	nA	0.05
	Id(Vr=5V)	nA	1
Reverse Breakdown voltage	VBR (Id=10uA)	V	30
Total capacitance	Cj (f=1MHz, Vr=0V)	pF	110
	Cj (f=1MHz, Vr=5V)	pF	35
Saturated Optical Power	Ps(Vr=0V)	mW	8(Min.5)
	Ps(Vr=5V)	mW	15
Reverse operating voltage	Vr	V	0-5
Shunt resistance	Rsh (Vr=10mV)	M Ω	200
Package	Hermetic package TO46 Can or with receptacle or with fiber coupling		

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

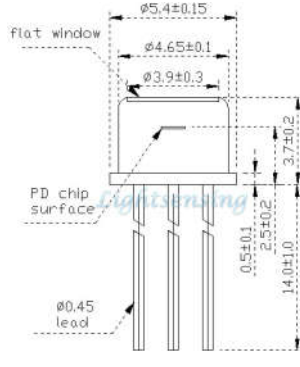
The typical Responsivity curve



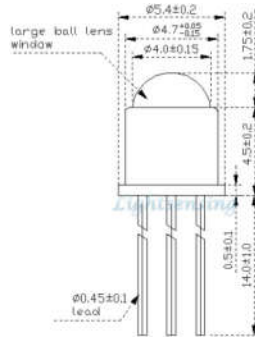
TO package and Lead



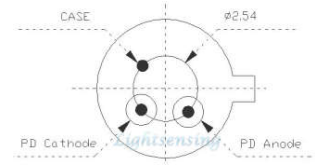
2mm flat window TO
Model: 0



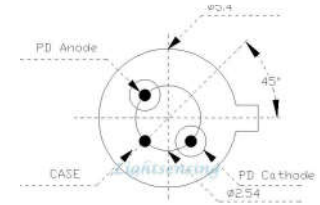
large flat window TO
Model: L0



Large ball lens TO
Model: L1



B Type PIN Bottom View



C Type PIN Bottom View

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

Order information

LSIPD-1S-X-X-X-X

B=B Type PIN(Standard products)
C=C Type PIN

X=0	TO46 Can with 2mm flat window cap(Standard products)	Fiber length X= Default 1m X=0.3m,0.5m or other
X=L0	TO46 Can with 3.9mm flat window cap(Standard products)	Tube X= Default 0.9mm tight tube X=S 0.9mm Loose tube
X=L1	TO46 Can with large ball lens cap(Standard products)	
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=10MMA/P	TO46 Can with 105um MM Fiber coupling with FC-APC/FC-PC connector	
X=20MMA/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=CWFC-5/12/16/20dB	TO46 Can with replaceable receptacle with FC connector and 5/12/16/20dB attenuation	
X=CWSC-5/12/16/20dB	TO46 Can with replaceable receptacle with SC connector and 5/12/16/20dB attenuation	
X=CWLC-5/12/16/20dB	TO46 Can with replaceable receptacle with LC connector and 5/12/16/20dB attenuation	
X=CWST-5/12/16/20dB	TO46 Can with replaceable receptacle with ST connector and 5/12/16/20dB attenuation	
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 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.

