

## 400nm-1700nm 2mm InGaAs PIN Photodiode Version: 3.2 17-04-18

### Model: LSIPD-2S

#### Features:

- High reliability, low dark current
- Active diameter 2mm
- 400-1700nm wide wavelength range
- Hermetic package TO5 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
Forward current	I <sub>f</sub>	15	mA
Reverse voltage	V <sub>r</sub>	10	V
Soldering temperature(time)	T <sub>s</sub> (10s)	260	°C

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

parameter	symbol	unit	Value (typ.)
Active diameter	Φ	mm	2
Spectral range	λ	nm	400-1700
Responsivity	Re(V <sub>R</sub> =0V,λ=405nm)	mA/mW	0.12
	Re(V <sub>R</sub> =0V,λ=650nm)	mA/mW	0.35
	Re(V <sub>R</sub> =0V,λ=850nm)	mA/mW	0.48
	Re(V <sub>R</sub> =0V,λ=1550nm)	mA/mW	0.90
Response time	T <sub>r</sub> (R <sub>L</sub> =50Ω, V <sub>R</sub> =5V)	ns	35
Dark current	I <sub>d</sub> (V <sub>R</sub> =0V)	nA	0.1
	I <sub>d</sub> (V <sub>R</sub> =5V)	nA	5
Reverse Breakdown voltage	V <sub>BR</sub> (I <sub>R</sub> =10uA)	V	20
Junction capacitance	C <sub>j</sub> (f=1MHz, V <sub>R</sub> =0V)	pF	1200
	C <sub>j</sub> (f=1MHz, V <sub>R</sub> =5V)	pF	240
Saturated Optical Power	P <sub>s</sub> (V <sub>R</sub> =5V)	mW	12
Operating voltage	V <sub>R</sub>	V	0-5
Shunt resistance	R <sub>sh</sub> (V <sub>R</sub> =10mV)	MΩ	100
package	Hermetic package TO5 Can or with receptacle or fiber coupling		

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

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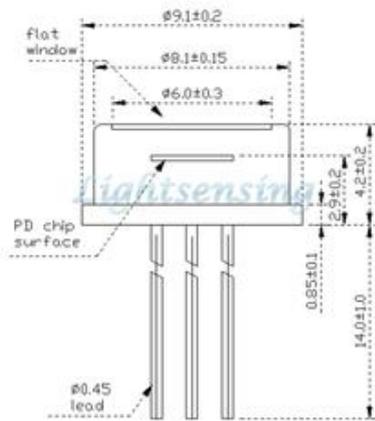
Address: Building E Rm 1201, Westing house, No 12 Suzhou Street,, Haidian District, Beijing 100080, China.

TEL: +86-010-82873449 FAX: +86-010-62557230 Email: [info@lightsensing.com](mailto:info@lightsensing.com) Website: [www.lightsensing.com](http://www.lightsensing.com)

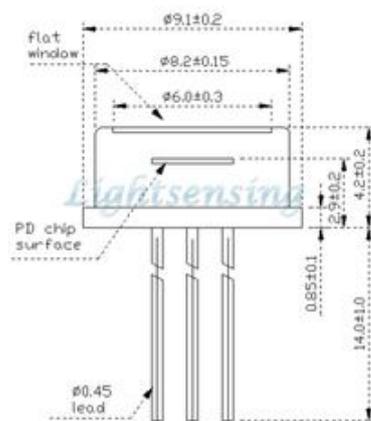
### The typical Responsivity curve



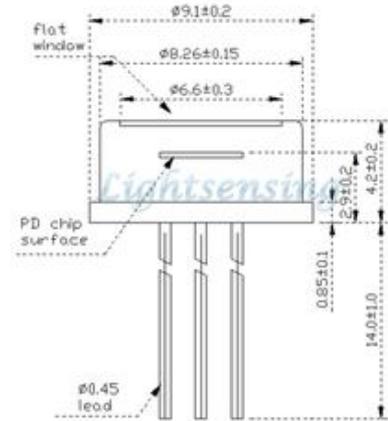
### TO package and Lead



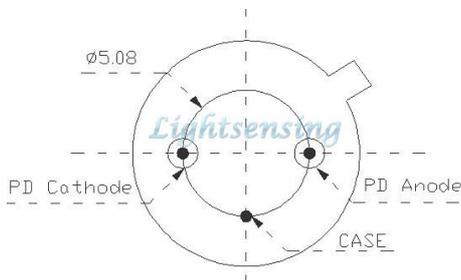
flat window 8.1mm TO  
Model: 08.1



flat window 8.20mm TO  
Model: 08.20



flat window 8.26mm TO  
Model: 08.26



Bottom View

**Note:** In order to get other dimensions, please contact us.

## Order information

LSIPD-2S-X

X=08.1-Au	TO-5 Can with flat window $\Phi$ 8.1mm Au cap
X=08.20	TO-5 Can with flat window $\Phi$ 8.2mm nickel cap
X=08.26	TO-5 Can with flat window $\Phi$ 8.26mm nickel cap
X=08.26A	TO-5 Can with flat window $\Phi$ 8.26mm nickel cap and Antireflection Coatings
X=CWFC	TO-5 Can with replaceable receptacle with FC connector
X=CWSC	TO-5 Can with replaceable receptacle with SC connector
X=CWLC	TO-5 Can with replaceable receptacle with LC connector
X=CWST	TO-5 Can with replaceable receptacle with ST connector
X=CWFC-20dB	TO-5 Can with replaceable receptacle with FC connector and 20dB attenuation
X=CWSC-20dB	TO-5 Can with replaceable receptacle with SC connector and 20dB attenuation
X=CWLC-20dB	TO-5 Can with replaceable receptacle with LC connector and 20dB attenuation
X=CWST-20dB	TO-5 Can with replaceable receptacle with ST connector and 20dB attenuation
X=20CWFC	TO-5 Can with 20mm replaceable receptacle with FC connector
X=20CWSC	TO-5 Can with 20mm replaceable receptacle with SC connector
X=20CWST	TO-5 Can with 20mm replaceable receptacle with ST connector
X=20CWLC	TO-5 Can with 20mm replaceable receptacle with LC connector
X=20CWFC-1	TO-5 Can with 20mm replaceable receptacle with FC connector and better repeatability but with lower saturated power
X=20CWSC-1	TO-5 Can with 20mm replaceable receptacle with SC connector and better repeatability but with lower saturated power
X=20CWST-1	TO-5 Can with 20mm replaceable receptacle with ST connector and better repeatability but with lower saturated power
X=20CWLC-1	TO-5 Can with 20mm replaceable receptacle with LC connector and better repeatability but with lower saturated power
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.