

## 2.5mm Silicon PIN photodiode

Version: 3.1 17-03-01

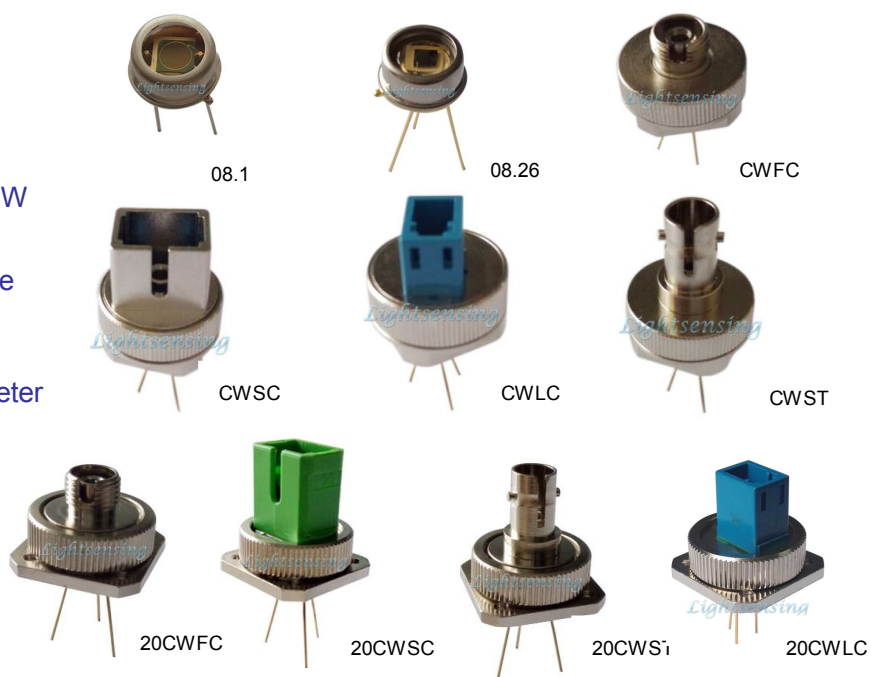
### Model: LSSPD-2.5

#### Features:

- High reliability, low dark current
- 400-1100nm spectral range
- 650nm responsivity up to 0.44mA/mW
- Active diameter 2.5x2.5mm
- Hermetic TO5 Can or with receptacle

#### Applications:

- Optical sensor and Optical power meter
- Industrial automatic control
- IR/ Laser light Monitoring
- Fluorescence detector
- Medical equipment
- Spectrophotometry/CT scan



#### Absolute maximum ratings:

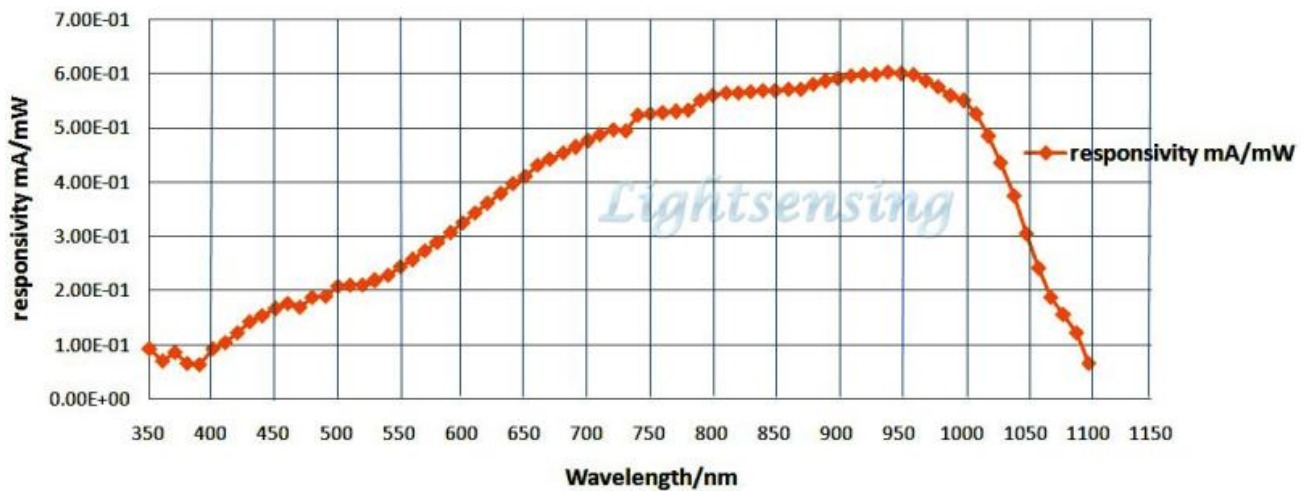
parameter	symbol	value	unit
Operating temperature	Top	-40~+85	℃
Storage temperature	Tstg	-40~+100	℃
Forward current	I <sub>f</sub>	13	mA
Reverse voltage	V <sub>r</sub>	20	V
Soldering temperature(time)	Ts (10s)	260	℃

#### Electrical and optical characteristics:(T=25℃)

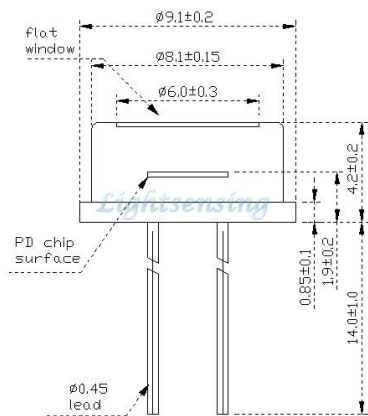
parameter	symbol	unit	Value (typ.)
Active diameter	Φ	mm	2.5x2.5
Spectral range	λ	nm	400-1100
Responsivity	Re(V <sub>R</sub> =5V,λ=405nm)	mA/mW	0.07
	Re(V <sub>R</sub> =5V,λ=650nm)	mA/mW	0.44
	Re(V <sub>R</sub> =5V,λ=850nm)	mA/mW	0.59
	Re(V <sub>R</sub> =5V,λ=1064nm)	mA/mW	0.25
Response time	T <sub>r</sub> (R <sub>L</sub> =50Ω, V <sub>R</sub> =5V)	ns	5
Dark current	I <sub>d</sub> (V <sub>R</sub> =0V)	PA	0.5
	I <sub>d</sub> (V <sub>R</sub> =5V)	PA	200
Reverse Breakdown voltage	V <sub>BR</sub> (I <sub>R</sub> =10uA)	V	70
Junction capacitance	C <sub>j</sub> (f=1MHz, V <sub>R</sub> =0V)	pF	90
	C <sub>j</sub> (f=1MHz, V <sub>R</sub> =5V)	pF	20
Saturated Optical Power	Ps(V <sub>R</sub> =5V)	mW	20
Operating voltage	V <sub>R</sub>	V	0-15V
Shunt resistance	R <sub>sh</sub> (V <sub>R</sub> =10mV)	GΩ	20
package	Hermetic TO5 Can or with receptacle		

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

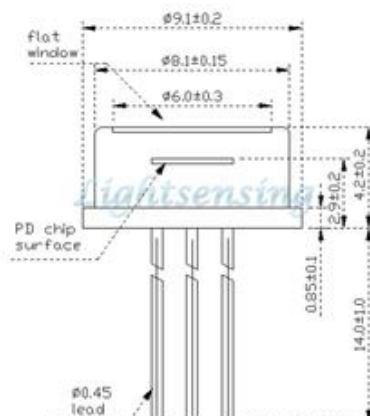
## The typical Responsivity curve



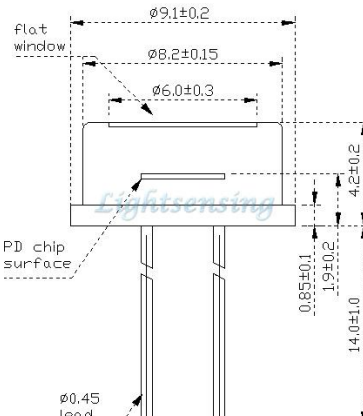
## TO package and Lead



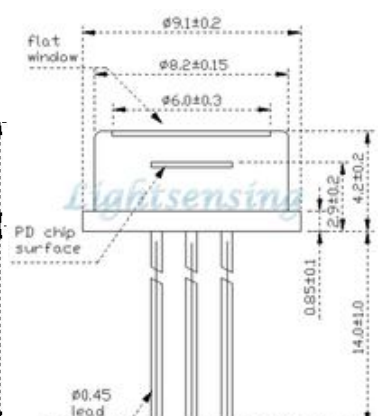
flat window 2 PIN 8.1mm TO  
Model: 08.1



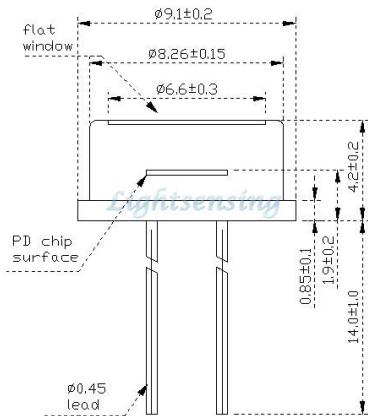
flat window 3PIN 8.1mm TO  
Model: 08.1



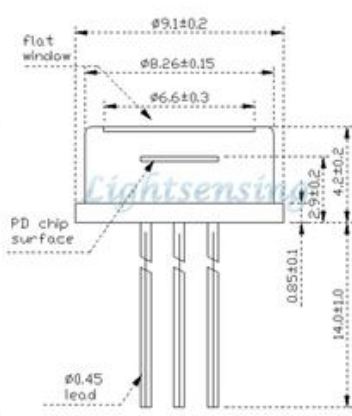
flat window 2 PIN 8.20mm TO  
Model: 08.20



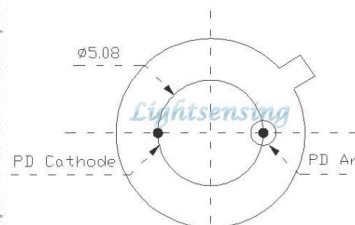
flat window 3PIN 8.20mm TO  
Model: 08.20



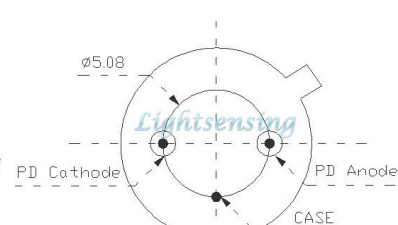
flat window 2 PIN 8.26mm TO  
Model: 08.26



flat window 3PIN 8.26mm TO  
Model: 08.26



2PIN Bottom View



3PIN Bottom View

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

## Order information

LSSPD-2.5-X-X

X=2P	2 PIN out	X=08.1	TO-5 Can with flat window $\Phi$ 8.1mm nickel cap
X=3P	3 PIN out	X=08.20	TO-5 Can with flat window $\Phi$ 8.20mm nickel cap
		X=08.26	TO-5 Can with flat window $\Phi$ 8.26mm nickel cap
		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=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=Other	By customer's request. <b>Example, We can provide photodiode with filter</b>

## 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