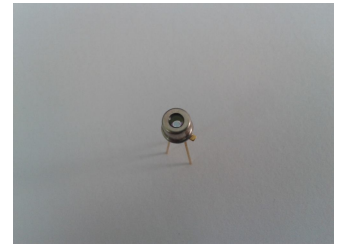


## 800-2100nm 300um InGaAs PIN Photodiode

**Model: LSIPD21-0.3**

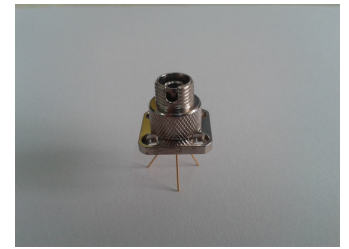
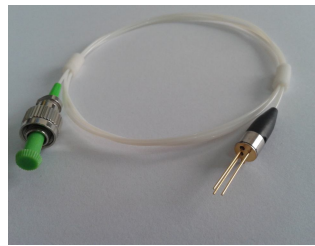
**Features:**

- Low noise, High reliability
- Top illumination planar PIN PD
- Active diameter 0.3mm
- Cut off wavelength to 2.1um



**Applications:**

- Gas Analyzer
- Environment measurement
- Science analysis and experiment
- Space light detect equipment
- Optical power meter
- NIR photometry
- Optical fiber sensor



**Absolute maximum ratings:**

parameter	symbol	value	unit
Operating temperature	Top	-40~+85	°C
Storage temperature	Tstg	-50~+125	°C
Forward current	I <sub>f</sub>	10	mA
Reverse voltage	V <sub>R</sub>	1	V
Power dissipation	W <sub>p</sub>	100	mW
Soldering temperature(time)	T <sub>s</sub> (10s)	260	°C

**Electrical and optical characteristics:(T=25°C, V<sub>R</sub>=0.5V)**

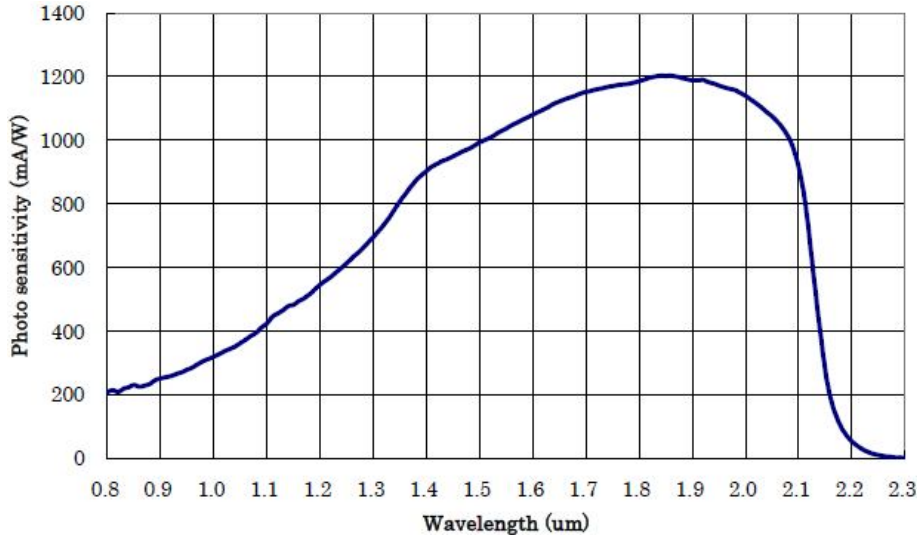
parameter	symbol	unit	Value (typ.)
Active diameter	Φ	mm	0.3
Spectral range	λ	nm	800-2100
Responsivity	Re (V <sub>R</sub> =0.5V,λ=1310nm )	mA/mW	0.7
	Re(V <sub>R</sub> =0.5V,λ=1600nm)	mA/mW	1.0
Response time	Tr (R <sub>L</sub> =50Ω, V <sub>R</sub> =0.5V)	ns	3
Dark current	I <sub>D</sub> (V <sub>R</sub> =0.5V)	nA	8
Reverse Breakdown voltage	V <sub>BR</sub> (I <sub>R</sub> =10uA)	V	1
Junction capacitance	C <sub>j</sub> (f=1MHz, V <sub>R</sub> =0.5V)	pF	20
Operating voltage	V <sub>R</sub>	v	0-0.5
Shunt impedance	Rsh (V <sub>R</sub> =10mV)	MΩ	0.9
package	TO-46		

地址: 北京市海淀区苏州街12号西屋国际A座1104 邮编: 100080

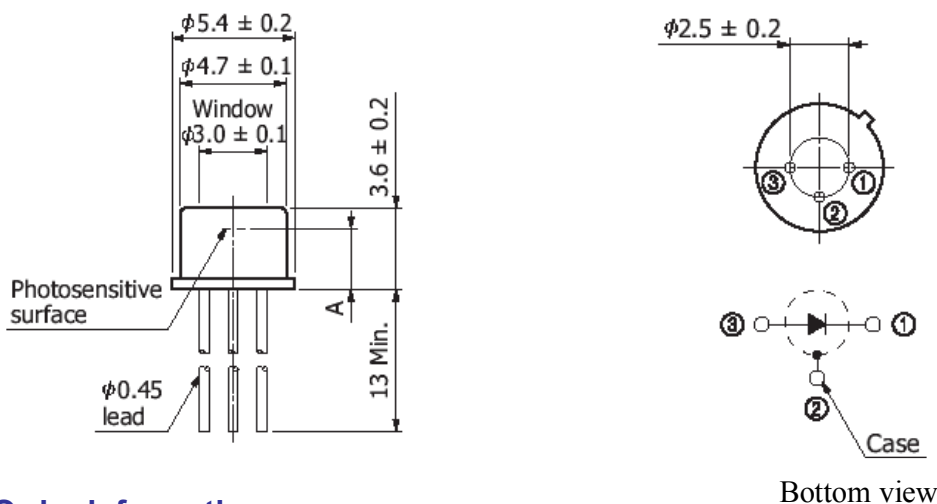
Address: Building A Rm 1104, Westing house, No 12 Suzhou Street,, Haidian District, Beijing 100080, China.

TEL: +86-010-53691988 FAX: +86-010-62557230 Email: [info@lightsensing.com](mailto:info@lightsensing.com) Website: [www.lightsensing.com](http://www.lightsensing.com)

### The typical Sensitivity curve



### The package and Lead



### Order information

LSIPD21-0.3-X

- |         |  |
|---------|--|
| X=0     | TO-46 Can with flat window cap                 |
| X=SMFP  | SM Fiber coupling with FC-PC connector         |
| X=SMFA  | SM Fiber coupling with FC-APC connector        |
| X=SMSA  | SM Fiber coupling with SC-APC connector        |
| X=5MMFA | 50um MM Fiber coupling with FC-APC connector   |
| X=6MMFA | 62.5um MM Fiber coupling with FC-APC connector |
| X=JKFC  | TO-46 Can with FC receptacle                   |
| X=Other | By customer's request                          |

### The cautions

- 1: The suitable ESD protection is required in storage, transportation and using
- 2: 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.

地址: 北京市海淀区苏州街12号西屋国际A座1104 邮编: 100080

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