

## 800nm-2400nm 500um InGaAs PIN photodiode

**Model: LSIPD24-0.5**

**Features:**

- High reliability, low dark current
- Top illumination planar PIN PD
- Cut off wavelength to 2400nm
- To-46 package



**Applications:**

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



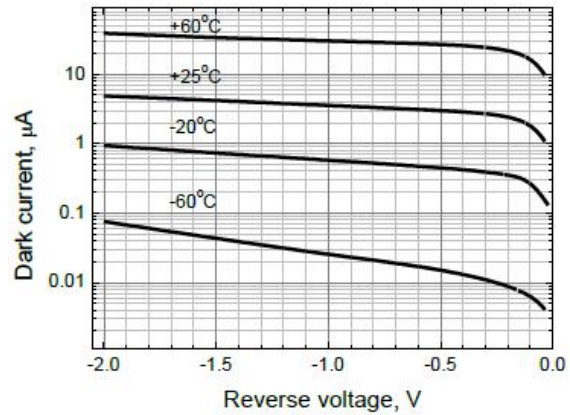
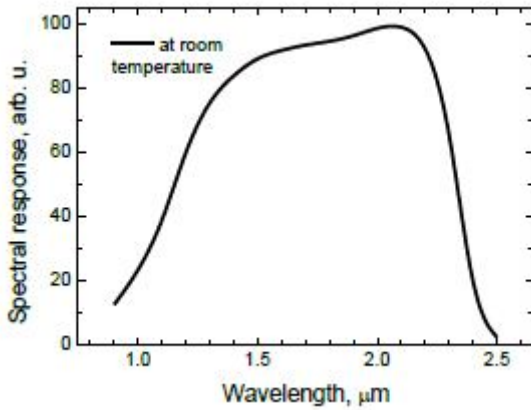
**Absolute maximum ratings:**

parameter	symbol	value	unit
Operating temperature	Top	-20~+50	°C
Storage temperature	Tstg	-55~+70	°C
Forward current	I <sub>f</sub>	10	mA
Reverse voltage	V <sub>r</sub>	2	V
Reverse current	I <sub>r</sub>	1	mA
Soldering temperature(time)	T <sub>s</sub> (10s)	260	°C

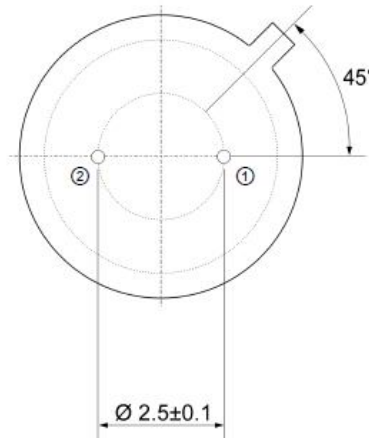
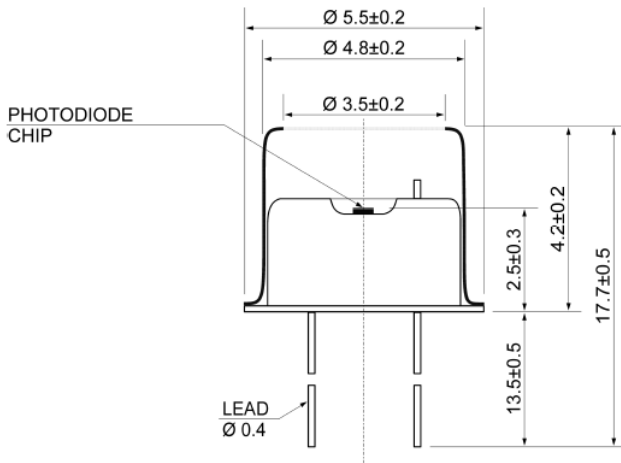
**Electrical and optical characteristics:(T=25°C)**

parameter	symbol	unit	Value (typ.)
Spectral range	$\lambda$	nm	800-2400
Active diameter	$\varnothing$	um	500
Responsivity	Re (V <sub>R</sub> =-0.2V, $\lambda$ =800nm )	mA/mW	0.08
	Re(V <sub>R</sub> =-0.2V, $\lambda$ =2100nm)	mA/mW	1.0
	Re(V <sub>R</sub> =-0.2V, $\lambda$ =2400nm)	mA/mW	0.10
Rise time	Tr (R <sub>L</sub> =50 $\Omega$ , V <sub>R</sub> =-0.2V)	ns	10
-3dBm Bandwidth	BW (R <sub>L</sub> =50 $\Omega$ , V <sub>R</sub> =-0.2V)	MHz	30
Dark current	I <sub>D</sub> (V <sub>R</sub> =-0.2V)	uA	10
Reverse Breakdown voltage	V <sub>BR</sub> (I <sub>R</sub> =10uA)	V	2
Junction capacitance	C <sub>j</sub> (f=1MHz, V <sub>R</sub> =-0.2V)	pF	150
Saturated Optical Power	Ps(V <sub>R</sub> =-0.2V)	mW	10
Operating voltage	V <sub>R</sub>	v	0-0.5
package	TO-46		

### The typical characteristic curve



### The package and Lead



1: Anode 2: Cathode

Bottom view

### Order information

LSIPD24-0.5-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.