

## 25G High Speed InGaAs PIN photodiode

Version: 3.1 17-03-01

### Model: LSIPD-25G

#### Features:

- High reliability, low dark current
- 800-1700nm spectral range
- High speed rate up to 25Gbps
- Hermetic TO46 Can package with fiber coupling

#### Applications:

- High Speed Fiber communication
- Fast optical pulse testing
- OTDR, Optical fiber sensor
- Industrial automatic control
- Science analysis and experiment



7 PIN connection Fiber coupling

Flex Circuit RF connection Fiber coupling

#### Absolute maximum ratings:

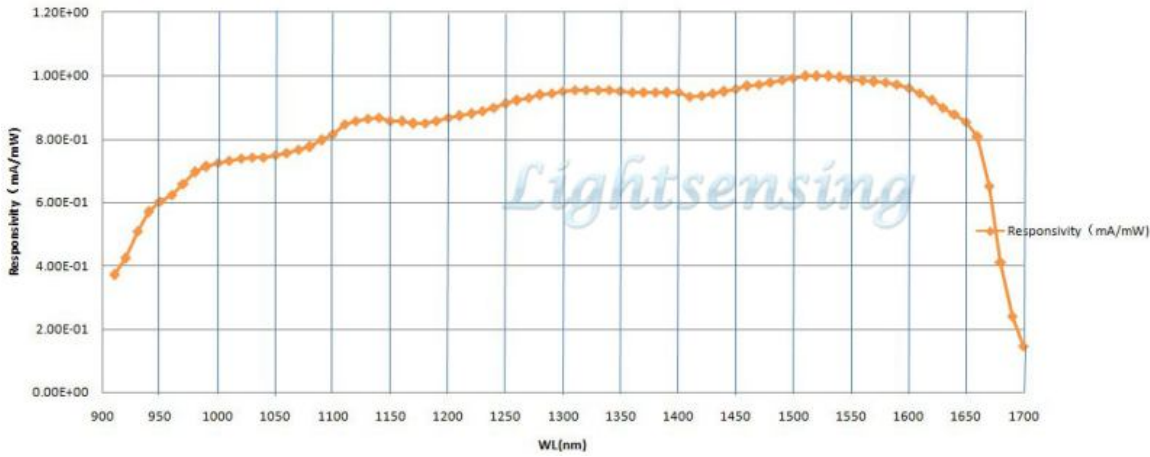
parameter	symbol	value	unit
Operating temperature	Top	-40~+85	°C
Storage temperature	Tstg	-40~+100	°C
Forward current	I <sub>f</sub>	3	mA
Reverse voltage	V <sub>r</sub>	20	V
Soldering temperature(time)	T <sub>s</sub> (10s)	260	°C

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

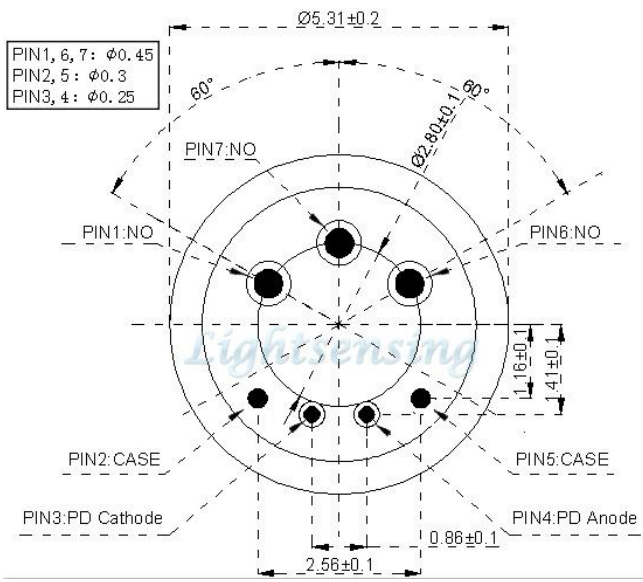
parameter	symbol	unit	Value (typ.)
Spectral range	$\lambda$	nm	800-1700
Responsivity	Re(V <sub>R</sub> =0V, $\lambda$ =1310nm)	mA/mW	0.75
	Re(V <sub>R</sub> =0V, $\lambda$ =1550nm)	mA/mW	0.80
Response time	T <sub>r</sub> (R <sub>L</sub> =50 $\Omega$ , V <sub>R</sub> =5V)	ps	16
Band width(-3dB)	BW(R <sub>L</sub> =50 $\Omega$ , V <sub>R</sub> =5V)	GHZ	22(25Gbps)
Dark current	I <sub>d</sub> (V <sub>R</sub> =0V)	nA	0.1
	I <sub>d</sub> (V <sub>R</sub> =5V)	nA	2
Reverse Breakdown voltage	V <sub>BR</sub> (I <sub>R</sub> =10 $\mu$ A)	V	20
Junction capacitance	C <sub>j</sub> (f=1MHz, V <sub>R</sub> =0V)	pF	60
	C <sub>j</sub> (f=1MHz, V <sub>R</sub> =5V)	pF	0.1
Maximum instantaneous input power	P <sub>s</sub> (V <sub>R</sub> =5V), 1550nm,10ns,10kHz	mW	4
Operating voltage	V <sub>R</sub>	V	0-5
Shunt resistance	R <sub>sh</sub> (V <sub>R</sub> =10mV)	M $\Omega$	100
package	Hermetic TO46 Can package with fiber coupling		

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

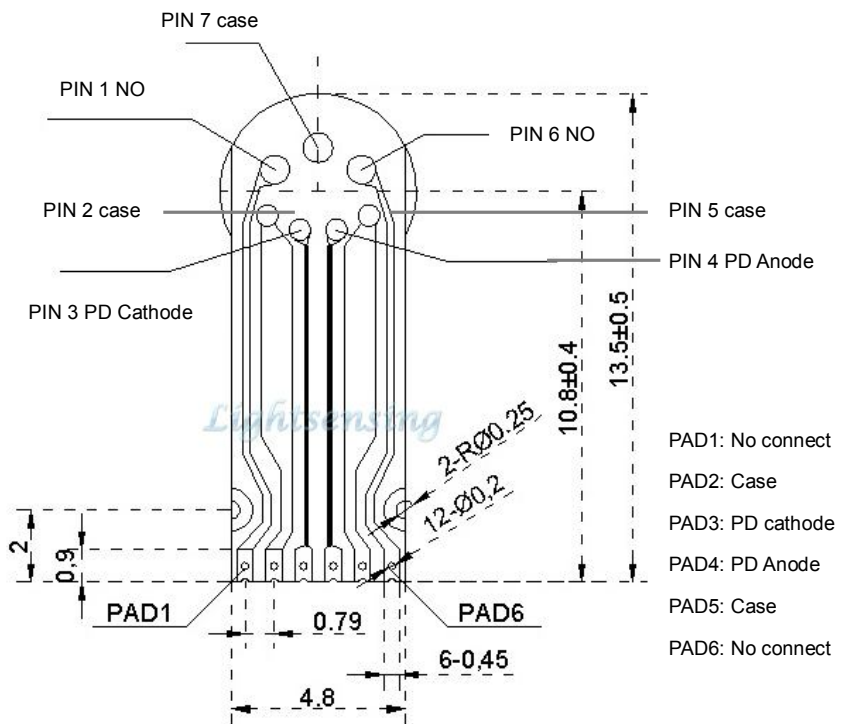
### The typical Responsivity curve



### PIN Description Bottom View



7 PIN connection Bottom View



6 PAD Flex Circuit RF connection Bottom View

### Order information

LSIPD-25G-X-X

X=TO 7 PIN TO

X=F Flex Circuit RF connection

X=SMFA

X=SMFP

X=SMSA

X=Other

TO-46 Can with SM Fiber coupling with FC-APC connector

TO-46 Can with SM Fiber coupling with FC-PC connector

TO-46 Can with SM Fiber coupling with SC-APC connector

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.