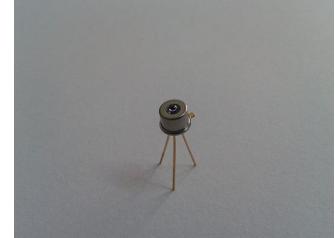


## 10Gbps InGaAs PIN Photodiode with pre-amplifier

### Model: LSIPDT-10

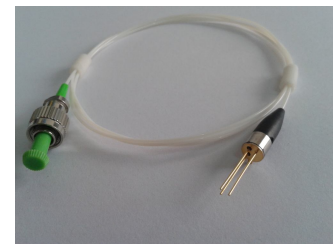
#### Features:

- High sensitivity at the wavelength of 1310nm/1550nm
- Data rate up to 10Gbps
- Low voltage power supply: 3.3V
- Differential output
- Operation temperature: -40°C to 85°C
- InGaAs PIN detector in industrial standard TO-46 package with pre-amplifier and lens cap or fiber coupling



#### Applications:

- Industrial automatic control
- Science analysis and experiment
- light detect equipment
- Telecommunication
- Data communication



#### Absolute maximum ratings:

parameter	symbol	value	unit
Operating temperature	Top	-40~+85	°C
Storage temperature	Tstg	-50~+85	°C
Power Supply Voltage	Vcc	0~+4	V
Soldering temperature(time)	Ts (10s)	260	°C

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

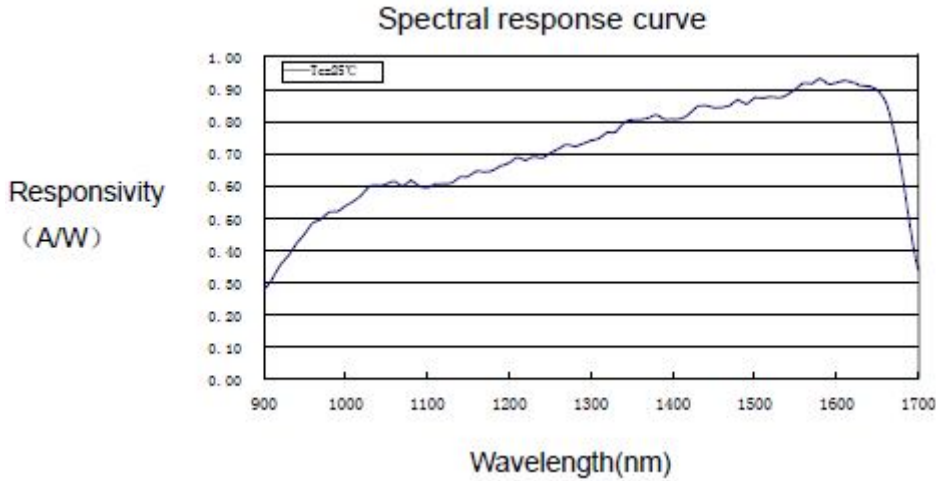
parameter	symbol	Min	Typ	Max	unit
TIA Supply Voltage	Vcc	3.1	3.3	3.5	mm
Supply Current	Icc (No loads)		27	34	mA
Spectral range	$\lambda$	800	1550	1700	nm
Bandwidth	BW(-3dB)	8.5			GH
Output Impedance	Rout	40	50	60	$\Omega$
Transimpedance	Zt(Differential)	5	9	11.5	k $\Omega$
Differential Output Voltage	VD (100 $\Omega$ differential load)	280	300	340	mV
Sensitivity	S(ER=7dB@10Gbps, BE R=10-10, PRBR=223-1)			-15	dBm
Saturation Power	Psat	0			dBm

地址: 北京市海淀区苏州街12号西屋国际A座1104 邮编: 100080

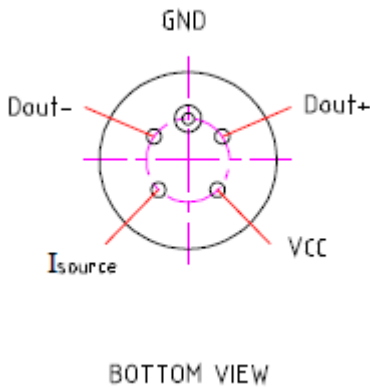
Address: Building A Rm 1104, Westing house, No 12 Suzhou Street,, Haidian District, Beijing 100080, China.

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 Responsivity Curve



## The package and Lead



## Order information

LSIPDT-10-X-X

X=0 5 PIN

X=F Flex Circuit RF connection

X=0

X=1

X=SMFP

X=SMFA

X=SMSA

X=5MMFA

X=6MMFA

X=Other

TO-46 Can with ball lens cap

TO-46 Can with flat window cap

SM Fiber coupling with FC-PC connector

SM Fiber coupling with FC-APC connector

SM Fiber coupling with SC-APC connector

50um MM Fiber coupling with FC-APC connector

62.5um MM Fiber coupling with FC-APC connector

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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