

10Gbps InGaAs PIN Photodiode with pre-amplifier

Version: 3.1 17-03-01

Model: LSIPDT-10G

Features:

- High sensitivity at the wavelength of 1310nm/1550nm
- Data rate up to 10.3Gbps
- Low voltage power supply: 3.3V
- Differential output
- Built-in InGaAs PIN+TIA
- Hermetic TO-46 Can or with fiber coupling



1



Fiber coupling

Applications:

- Telecommunication
- Data communication
- Optical sensor
- high resolution Optical Coherence Tomography
- Industrial automatic control
- Science analysis and experiment

Absolute maximum ratings:

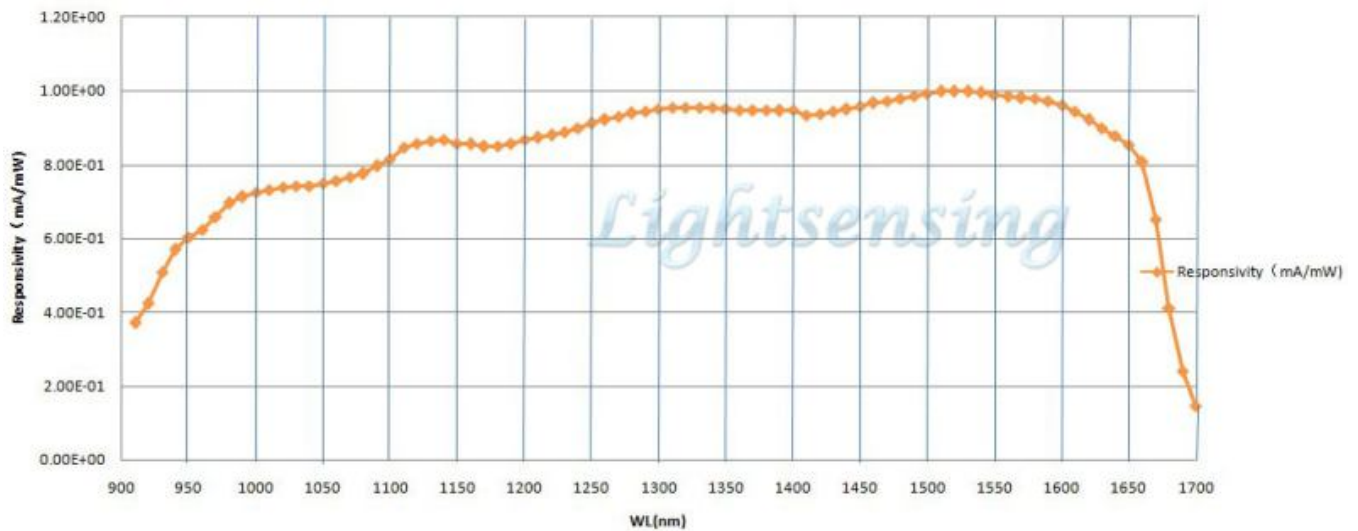
parameter	symbol	value	unit
Operating temperature	Top	-40~+85	°C
Storage temperature	Tstg	-50~+85	°C
Power Supply Voltage	Vcc	0~+4	V
Soldering temperature(time)	Ts (10s)	260	°C

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

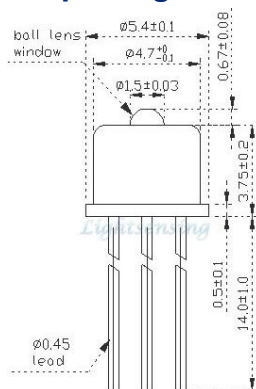
parameter	symbol	Test conditions	Min	Typ	Max	unit
TIA Supply Voltage	Vcc		3.1	3.3	3.5	mm
TIA Supply Current		Icc (No loads)		28	35	mA
Spectral range	λ		800	1550	1700	nm
Small signal bandwidth(-3dB)	BW		8.7			GH
Low frequency cut-off	LF	-3dB		20		KHZ
Output Impedance	Rout	Differential output	80	100	140	Ω
Transimpedance	Zt	Differential		9		k Ω
Differential Output Voltage	VD	(100 Ω differential load)		300		mV
Sensitivity	S	ER=7dB@10.3Gbps, BER=10 ⁻¹¹ ,PRBR=2 ²³ -1,1310nm			-15.5	dBm
Saturated optical power	Psat		0			dBm
package	Hermetic TO-46 Can with pre-amplifier and with lens cap or with fiber coupling					

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

The typical Responsivity Curve

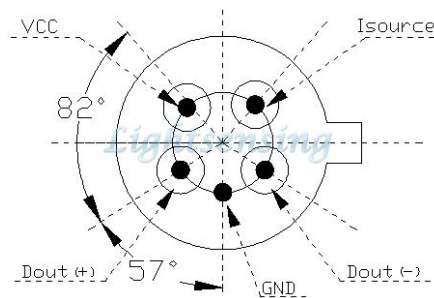


The package and Lead



Standard ball lens TO

Model: 1



Bottom View

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

Order information

LSIPDT-10G-X-X

X=TO 5 PIN TO

X=F Flex Circuit RF connection

X=1

X=SMFP

X=SMFA

X=SMSA

X=5MMFA

X=6MMFA

X=Other

TO-46 Can with ball lens 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 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.