

400-1700nm Fast InGaAs PIN photodiode

V4. IVID-001 20-10-01

Model: LSIPD-0.1S
Features:

- High reliability, low dark current
- Active diameter 0.1mm,
- -3dB Bandwidth up to 1GHz
- 400-1700nm wide wavelength range
- Hermetic package TO46 Can or with receptacle or fiber coupling


Applications:

- Optical sensor, Temperature sensing, Covert IR sensing
- Medical and Chemical analysis, Spectrography
- Light Detection and ranging, Industrial automatic control
- Science analysis and experiment, Space light detect equipment

Absolute maximum ratings:

parameter	symbol	value	unit
Operating temperature	Top	-40~+85	°C
Storage temperature	Tstg	-40~+100	°C
Reverse voltage	Vr	10	V
Soldering temperature(time)	Ts(10s)	260	°C

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

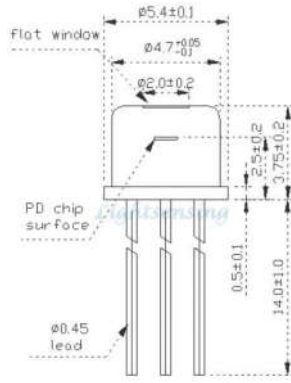
parameter	symbol	unit	Value (typ.)
Active diameter	Φ	mm	0.1
Spectral range	λ	nm	400-1700
Responsivity	Re(Vr=0V, λ =405nm)	mA/mW	0.08
	Re(Vr=0V, λ =650nm)	mA/mW	0.25
	Re(Vr=0V, λ =850nm)	mA/mW	0.45
	Re(Vr=0V, λ =1550nm)	mA/mW	0.9
Response time	Tr (RL=50 Ω ,Vr=5V)	ns	0.25
Band width(-3dB)	BW (RL=50 Ω ,Vr=5V)	GHz	1
Dark current	Id(Vr=0V)	pA	2
	Id(Vr=5V)	pA	10
Reverse Breakdown voltage	VBR (Id=10uA)	V	30
Total capacitance	Cj (f=1MHz, Vr=0V)	pF	30
	Cj (f=1MHz, Vr=5V)	pF	2.0
Saturated Optical Power	Ps(Vr=5V)	mW	4
Reverse operating voltage	Vr	V	0-5
Shunt resistance	Rsh (Vr=10mV)	G Ω	5
Package	Hermetic package TO46 Can or with receptacle or fiber coupling		

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

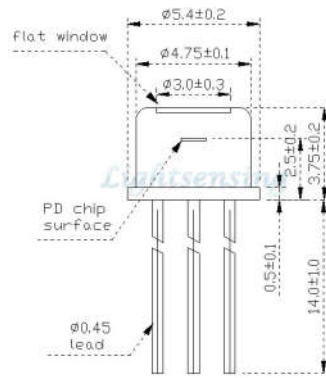
Note: For more information on dimension, please contact us.

The typical Responsivity curve

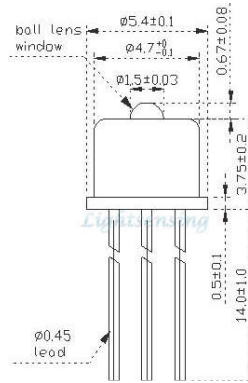

TO package and Lead



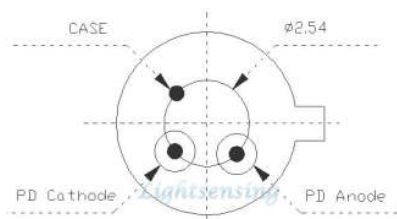
2mm flat window TO
Model: 0



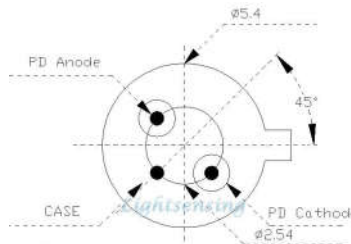
3mm flat window TO
Model: 03



Standard ball lens TO
Model: 1



B Type PIN description
Bottom View



C Type PIN description
Bottom View

Order information

LSIPD-0.1S-X-X-X-X

B=B Type PIN

C=C Type PIN (Standard products)

X=0

X=03

X=1

X=SMFA/P

X=SMSA/P

X=5MMFA/P

X=6MMFA/P

X=2JKFC

X=4JKFC

X=Other

TO46 Can with 2mm flat window cap

TO46 Can with 3mm flat window cap(Standard products)

TO46 Can with ball lens cap

TO46 Can with SM Fiber coupling with FC-APC/FC-PC connector

TO46 Can with SM Fiber coupling with SC-APC/SC-PCconnector

TO46 Can with 50um MM Fiber coupling with FC-APC/FC-PC connector

TO46 Can with 62.5um MM Fiber coupling with FC-APC/FC-PC connector

TO46 Can with fixed receptacle with FC connector and 2 mounting holes

TO46 Can with fixed receptacle with FC connector and 4 mounting holes

By customer's request

Fiber length

X= Default 1m

X=0.3m,0.5m or other

Tube

X= Default 0.9mm tight tube

X=S 0.9mm Loose tube

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.

