# 800-2200nm 0.5mm InGaAs PIN Photodiode

Model: LSIPD22-0.5

Features:

- Low noise, High reliability
- 800-2200nm wide wavelength range
- Active diameter 0.5mm
- Hermetic package TO46 Can or with receptacle or fiber coupling

Applications:

- Gas Analyzer
- Environment measurement
- Optical sensor, Temperature sensing
- Covert IR sensing, Spectrography
- Medical and Chemical analysis
- Optical power meter, Space light detect equipment

03

2JKFC   4JKFC   Fiber coupling
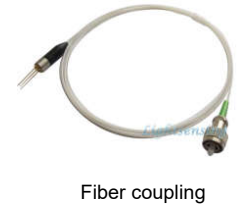
Absolute maximum ratings:

parameter	symbol	value	unit
Operating temperature	Top	-40～+85	℃
Storage temperature	Tstg	-40～+100	℃
Reverse voltage	Vr	1	V
Soldering temperature(time)	Ts(10s)	260	℃

Electrical and optical characteristics:(T=25℃)

parameter	symbol	unit	Value（typ.）
Active diameter	Φ	mm	0.5
Spectral range	λ	nm	800-2200
Responsivity	Re (Vr=0V,λ=850nm,1mW)	mA/mW	0.18
	Re (Vr=0V,λ=1310nm,1mW)	mA/mW	0.60
	Re(Vr=0V,λ=1900nm,1mW)	mA/mW	1.0
	Re(Vr=0V,λ=2200nm,1mW)	mA/mW	0.85
Response time	Tr (RL=50Ω, Vr=0.5V)	ns	20
Dark current	Id(Vr=0V)	uA	0.01
	Id(Vr=0.5V)	uA	0.6
Reverse Breakdown voltage	V_{BR} (Id=10uA)	V	2
Total capacitance	Cj (f=1MHz, Vr=0V)	pF	1000
	Cj (f=1MHz, Vr=0.5V)	pF	300
Saturated Optical Power	Ps(Vr=0.5V)	mW	3
Reverse operating voltage	Vr	V	0-0.5
Shunt impedance	Rsh (Vr=10mV)	MΩ	0.5
Package	Hermetic package TO46 Can or with receptacle or fiber coupling		

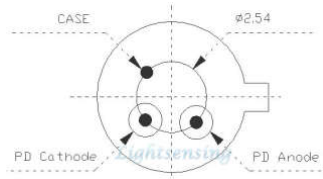NOTICE: The above product specifications are subject to change without notice.
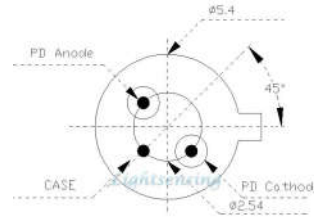
The typical Sensitivity curve
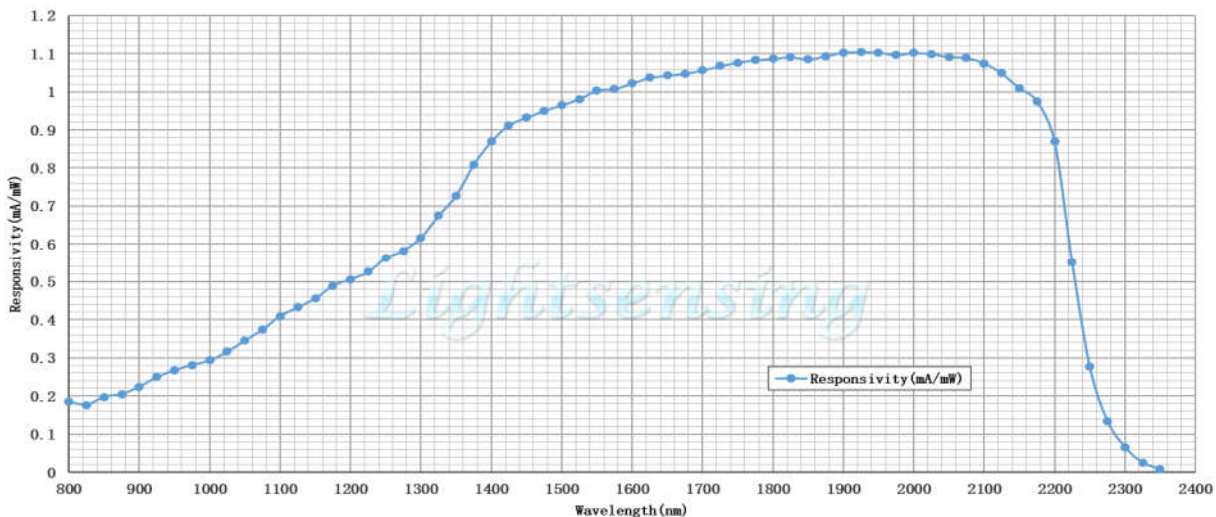
TO package and Lead
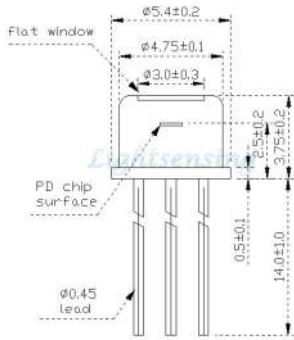
3mm flat window TO
Model: 03

B Type PIN description
Bottom View

C Type PIN description
Bottom View

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

Order information

LSIPD22-0.5-X-X-X-X

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

X=B   B Type PIN
X=C   CType PIN **(Standard products)**
X=Other

X=03	TO46 Can with 3mm Flat window nickel-plated cap**(Standard products）**
X=SMFA/P	TO46 Can with SM Fiber coupling with FC-APC/FC-PC connector
X=SMSA/P	TO46 Can with SM Fiber coupling with SC-APC/SC-PC connector
X=5MMFA/P	TO46 Can with 50um MM Fiber coupling with FC-APC/FC-PC connector
X=6MMFA/P	TO46 Can with 62.5um MM Fiber coupling with FC-APC/FC-PC connector
X=10MMFA/P	TO46 Can with 105um MM Fiber coupling with FC-APC/FC-PC connector
X=2JKFC	TO46 Can with fixed receptacle with FC connector and 2 mounting holes
X=4JKFC	TO46 Can with fixed receptacle with FC connector and 4 mounting holes
X=Other	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.