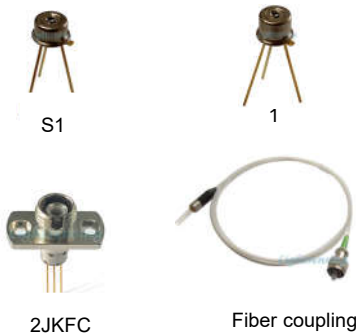


40um 6GHz Analog InGaAs PIN photodiode

V4.1HIPD-001 20-10-01

Model: LSIPD-A40
Features:

- High reliability, low dark current
- 800-1700nm spectral range
- -3dB Bandwidth up to 6GHz
- Hermetic TO46 Can or with receptacle or fiber coupling


Applications:

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

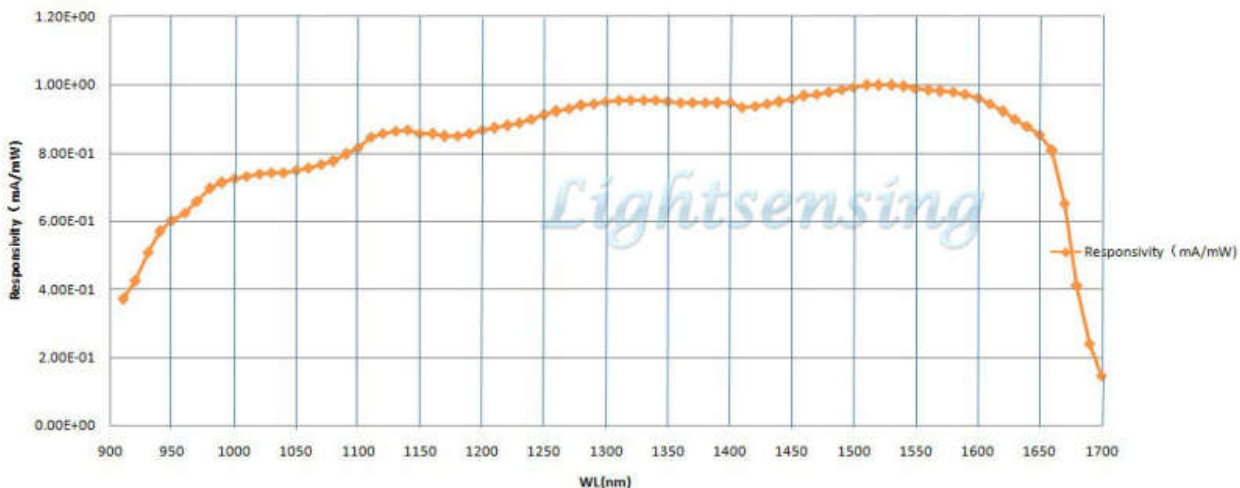
Absolute maximum ratings:

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

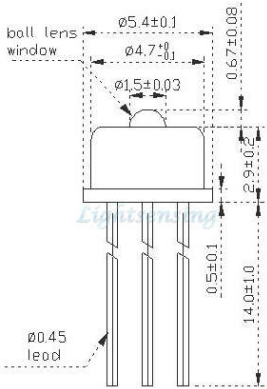
Electrical and optical characteristics:(T=25°C)

parameter	symbol	unit	Value (typ.)
Spectral range	λ	nm	800-1700
Active diameter	ϕ	um	40
Responsivity for fiber coupling	Re(Vr=0V, λ =1310nm)	mA/mW	0.80
	Re(Vr=0V, λ =1550nm)	mA/mW	0.85
Responsivity for receptacle and SM fiber	Re(Vr=0V, λ =1310nm)	mA/mW	0.75
	Re(Vr=0V, λ =1550nm)	mA/mW	0.80
Response time	Tr (RL=50Ω, Vr=5V)	ps	60
Band width(-3dB)	BW(RL=50Ω, Vr=5V)	GHz	6
Dark current	Id(Vr=0V)	pA	0.15
	Id(Vr=5V)	pA	15
Reverse Breakdown voltage	VBR (Id=10uA)	V	40
Total capacitance	Cj (f=1MHz, Vr=0V)	pF	100
	Cj (f=1MHz, Vr=5V)	pF	0.4
Saturated Optical Power	Ps(Vr=5V)	mW	5
2nd Order Inter-modulation distortion	CSO(Two tones, RL=50Ω, 1mW, VR=5V)	dBc	-75
Reverse operating voltage	Vr	V	0-5
Shunt resistance	Rsh (Vr=10mV)	GΩ	75
package	Hermetic TO46 Can or with receptacle or fiber coupling		

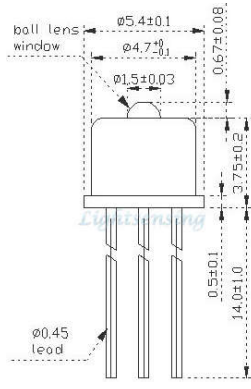
NOTICE: The above product specifications are subject to change without notice.

The typical Responsivity curve


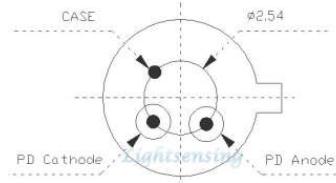
TO package and Lead



Short ball lens TO
Model: S1



Standard ball lens TO
Model: 1



Type B PIN description
Bottom View

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

Order information

LSIPD-A40-X-X-X-X

X=B Type B PIN description
X=other

- | | |
|-----------|---|
| X=S1 | TO46 Can with short ball lens cap |
| X=S1A | TO46 Can with short ball lens cap and Antireflection Coatings(Standard products) |
| X=1 | TO46 Can with ball lens cap |
| X=1A | TO46 Can with ball lens cap and Antireflection Coatings(Standard products) |
| X=SMFA/P | TO46 Can with SM Fiber coupling with FC-APC/FC-PC connector(Standard products) |
| 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=2JKFC | TO46 Can with fixed receptacle with FC connector and 2 mounting holes |
| X=Other | 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

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.

