

400-1700nm Fast InGaAs PIN photodiode Version: 3.1 17-03-01

Model: LSIPD-0.1S

Features:

- High reliability, low dark current
- Active diameter 0.1mm,
- -3dB Bandwidth up to 1.5GHZ
- 400-1700nm wide wavelength range
- Hermetic package TO46 Can or with receptacle or fiber coupling



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Fiber coupling



2JKFC



4JKFC

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
Forward current	I _f	5	mA
Reverse voltage	V _r	15	V
Soldering temperature(time)	T _s (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(V _R =0V,λ=405nm)	mA/mW	0.08
	Re(V _R =0V,λ=650nm)	mA/mW	0.25
	Re(V _R =0V,λ=850nm)	mA/mW	0.45
	Re(V _R =0V,λ=1550nm)	mA/mW	0.9
Response time	T _r (R _L =50Ω, V _R =5V)	ns	0.25
Band width(-3dB)	BW (R _L =50Ω, V _R =5V)	GHZ	1.5
Dark current	I _d (V _R =0V)	pA	2
	I _d (V _R =5V)	pA	10
Reverse Breakdown voltage	V _{BR} (I _R =10uA)	V	30
Junction capacitance	C _j (f=1MHz, V _R =0V)	pF	30
	C _j (f=1MHz, V _R =5V)	pF	2.0
Saturated Optical Power	P _s (V _R =5V)	mW	4
Operating voltage	V _R	V	0-5
Shunt resistance	R _{sh} (V _R =10mV)	GΩ	5
package	Hermetic package TO46 Can or with receptacle or fiber coupling		

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

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

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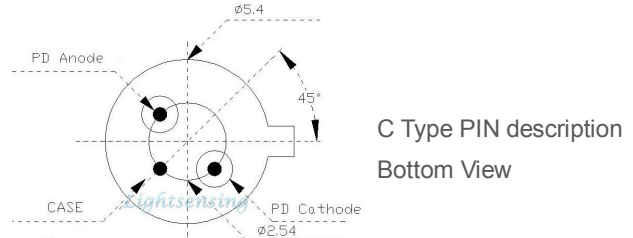
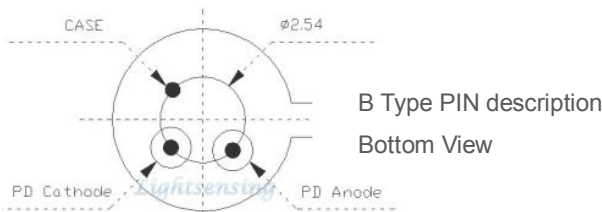
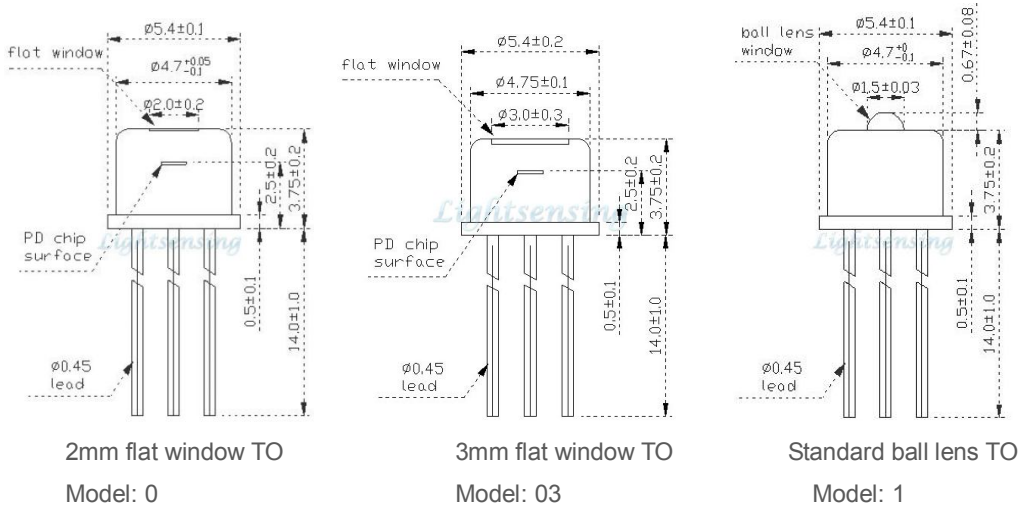
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The typical Responsivity curve



TO package and Lead



Order information

LSIPD-0.1S-X-X

B=B Type PIN description
C=C Type PIN description

- | | |
|------------|---|
| X=0 | TO-46 Can with 2mm flat window cap |
| X=03 | TO-46 Can with 3mm flat window cap |
| X=1 | TO-46 Can with ball lens cap |
| X=SMFA/P | TO-46 Can with SM Fiber coupling with FC-APC/FC-PC connector |
| X=SMSA | TO-46 Can with SM Fiber coupling with SC-APC connector |
| X=5MMFA/P | TO-46 Can with 50um MM Fiber coupling with FC-APC/FC-PC connector |
| X=6MMFA/P | TO-46 Can with 62.5um MM Fiber coupling with FC-APC/FC-PC connector |
| X=10MMFA/P | TO-46 Can with 105um MM Fiber coupling with FC-APC/FC-PC connector |
| X=20MMFA/P | TO-46 Can with 200um MM Fiber coupling with FC-APC/FC-PC connector |
| X=2JKFC | TO-46 Can with fixed receptacle with FC connector and 2 pieces of fix holes |
| X=4JKFC | TO-46 Can with fixed receptacle with FC connector and 4 pieces of fix 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.

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