

## 75um 2.5GHz Analog InGaAs PIN photodiode

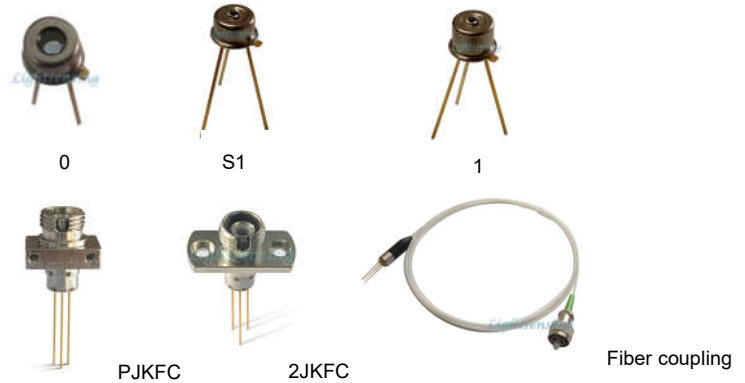
V4.1HIPD-003 20-10-01

**Model: LSIPD-A75**
**Features:**

- High reliability, low dark current
- 800-1700nm spectral range
- -3dB Bandwidth up to 2.5GHz
- HermeticTO46 Can or with receptacle or fiber coupling

**Applications:**

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

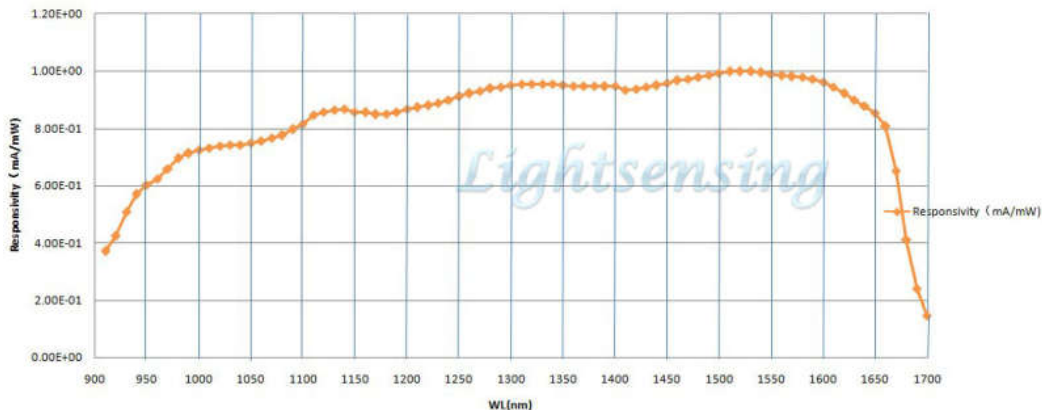

**Absolute maximum ratings:**

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	$\lambda$	nm	800-1700
Active diameter	$\varphi$	um	75
Responsivity	Re(Vr=0V, $\lambda$ =1310nm)	mA/mW	0.85
	Re(Vr=0V, $\lambda$ =1550nm)	mA/mW	0.90
Response time	Tr (RL=50Ω,Vr=5V)	ps	140
Band width(-3dB)	BW (RL=50Ω,Vr=5V)	GHz	2.5
Dark current	Id(Vr=0V)	pA	0.2
	Id(Vr=5V)	pA	18
Reverse Breakdown voltage	VBR (Id=10uA)	V	40
Total capacitance	Cj (f=1MHz, Vr=0V)	pF	400
	Cj (f=1MHz, Vr=5V)	pF	1
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	50
package	HermeticTO46 Can or with receptacle or with fiber coupling		

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

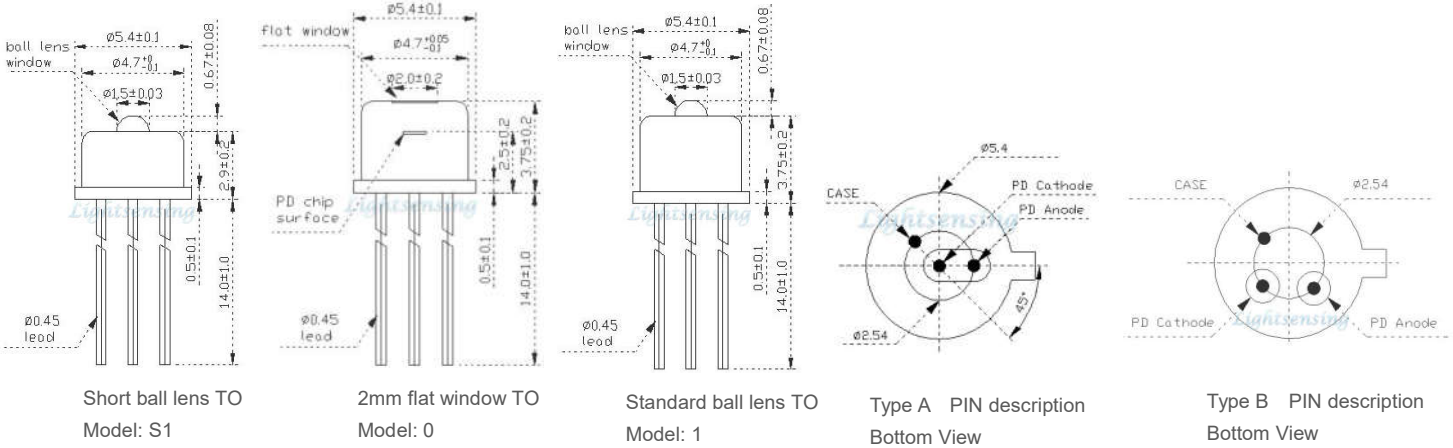
**The typical Responsivity curve**


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**TO package and Lead**



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

**Order information**

LSIPD-A75-X-X-X-X

X=A Type A PIN description  
 X=B Type B PIN description  
 X=other By customer's request

X=0  
 X=S1  
 X=S1A  
 X=1  
 X=1A  
 X=SMFA/P  
 X=SMSA/P  
 X=5MMFA/P  
 X=6MMFA/P  
 X=PJKFC  
 X=2JKFC  
 X=Other

TO46 Can with 2mm flat window cap  
 TO46 Can with short ball lens cap  
 TO46 Can with short ball lens cap and Antireflection Coatings  
 TO46 Can with ball lens cap **(Standard products)**  
 TO46 Can with ball lens cap and Antireflection Coatings **(Standard products)**  
 TO46 Can with SM Fiber coupling with FC-APC/FC-PC connector **(Standard products)**  
 TO46 Can with SM Fiber coupling with SC-APC/SC-PC connector  
 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 by plane mount  
 TO46 Can with fixed receptacle with FC connector and 2 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.

