

Low Dark Current 1mm InGaAs PIN photodiode

Version: 3.1 17-03-01

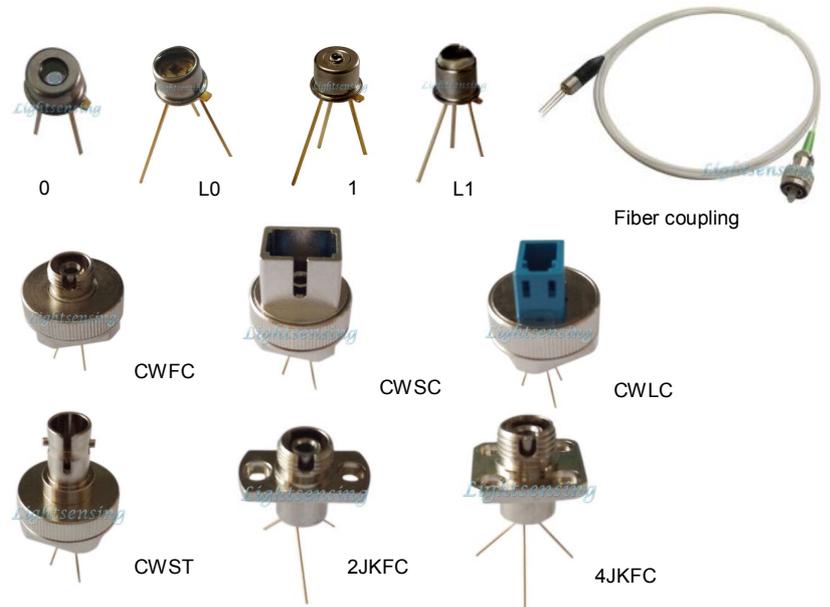
Model: LSIPD-UL1

Features:

- high reliability, Ultra low dark current
- low capacitance
- 800-1700nm spectral range
- Active diameter 1mm
- Hermetic TO46 Can or with receptacle or with fiber coupling

Applications:

- Optical sensor and Optical power meter
- Industrial automatic control
- Science analysis and experiment
- Space light detect equipment
- Response spectrum testing



Absolute maximum ratings:

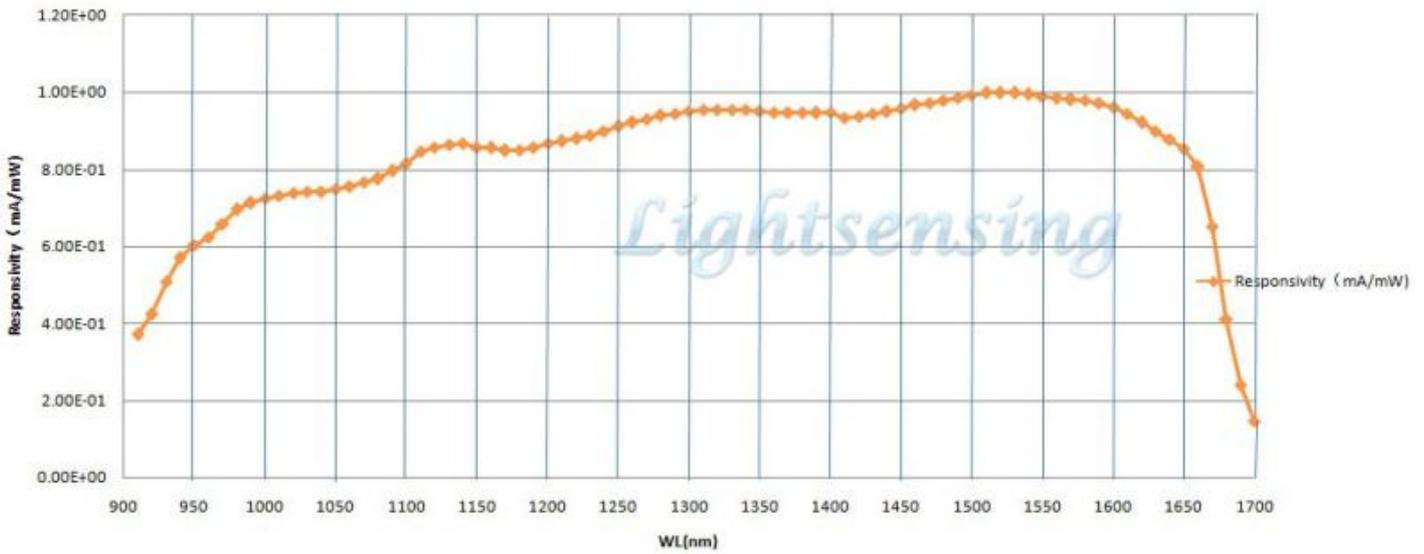
parameter	symbol	value	unit
Operating temperature	Top	-40~+85	°C
Storage temperature	Tstg	-40~+100	°C
Forward current	I _f	12	mA
Reverse voltage	V _r	20	V
Soldering temperature(time)	T _s (10s)	260	°C

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

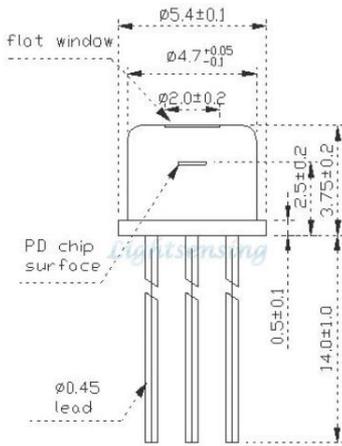
parameter	symbol	unit	Value (typ.)
Active diameter	Φ	mm	1
Spectral range	λ	nm	800-1700
Responsivity	Re(V _R =0V,λ=1310nm)	mA/mW	0.85
	Re(V _R =0V,λ=1550nm)	mA/mW	0.90
Response time	T _r (R _L =50Ω, V _R =5V)	ns	7
Dark current	I _d (V _R =0V)	nA	0.01
	I _d (V _R =5V)	nA	0.2
Reverse Breakdown voltage	V _{BR} (I _R =10uA)	V	40
Junction capacitance	C _j (f=1MHz, V _R =0V)	pF	600
	C _j (f=1MHz, V _R =5V)	pF	50
Saturated Optical Power	P _s (V _R =5V, Flat window TO Can)	mW	10
Operating voltage	V _R	V	0-5
Shunt resistance	R _{sh} (V _R =10mV)	MΩ	1000
package	Hermetic TO46 Can or with receptacle or with fiber coupling		

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

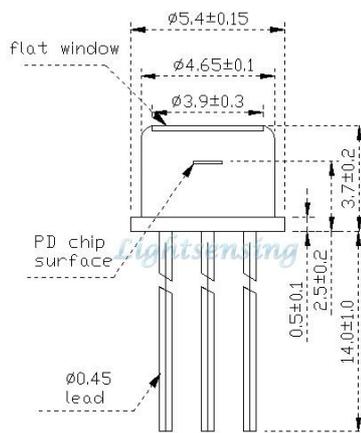
The typical Responsivity curve



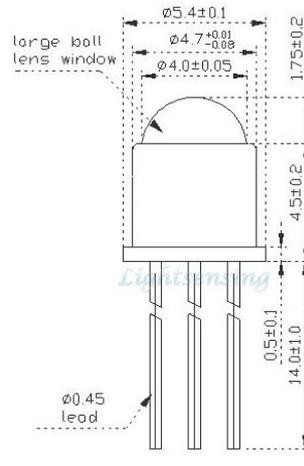
TO package and Lead



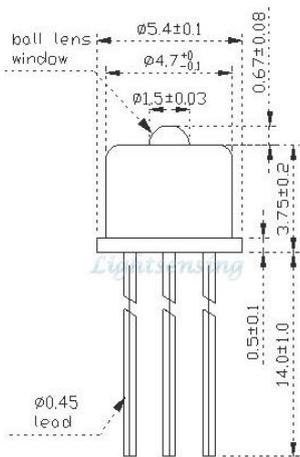
Standard flat window TO
Model: 0



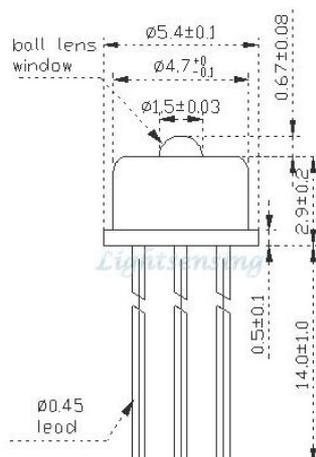
large flat window TO
Model: L0



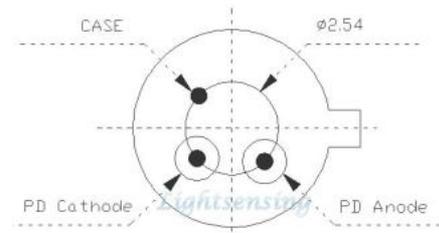
Large ball lens TO
Model: L1



Standard ball lens cap TO
Model: 1



Short ball lens cap TO
Model: S1



Type B PIN description
Bottom View

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

Order information

LSIPD-UL1-X-X

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

X=0	TO-46 Can with 2mm flat window cap
X=0A	TO-46 Can with 2mm flat window cap and Antireflection Coatings
X=L0	TO-46 Can with 3.9mm flat window cap
X=L0A	TO-46 Can with 3.9mm flat window cap and Antireflection Coatings
X=1	TO-46 Can with ball lens cap
X=1A	TO-46 Can with ball lens cap and Antireflection Coatings
X=S1	TO-46 Can with short ball lens cap
X=S1A	TO-46 Can with short ball lens cap and Antireflection Coatings
X=L1	TO-46 Can with large 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=10MMA/P	TO-46 Can with 105um MM Fiber coupling with FC-APC/FC-PC connector
X=20MMA/P	TO-46 Can with 200um MM Fiber coupling with FC-APC/FC-PC connector
X=40MMA/P	TO-46 Can with 400um MM Fiber coupling with FC-APC/FC-PC connector
X=CWFC	TO-46 Can with replaceable receptacle with FC connector
X=CWSC	TO-46 Can with replaceable receptacle with SC connector
X=CWLC	TO-46 Can with replaceable receptacle with LC connector
X=CWST	TO-46 Can with replaceable receptacle with ST 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.