# low dark current 0.3mm Anolog InGaAs PIN photodiode

Model: LSIPD-UL0.3

Features:

- High reliability, Ultra low dark current
- 800-1700nm spectral range
- Active diameter 0.3mm
- Hermetic TO46 Can or Mini TO Can or with receptacle or with fiber coupling

Applications:

- Optical sensor and Analog CATV
- Optical power meter
- Industrial automatic control
- Medical field application
- Security field application

1   S1   L1

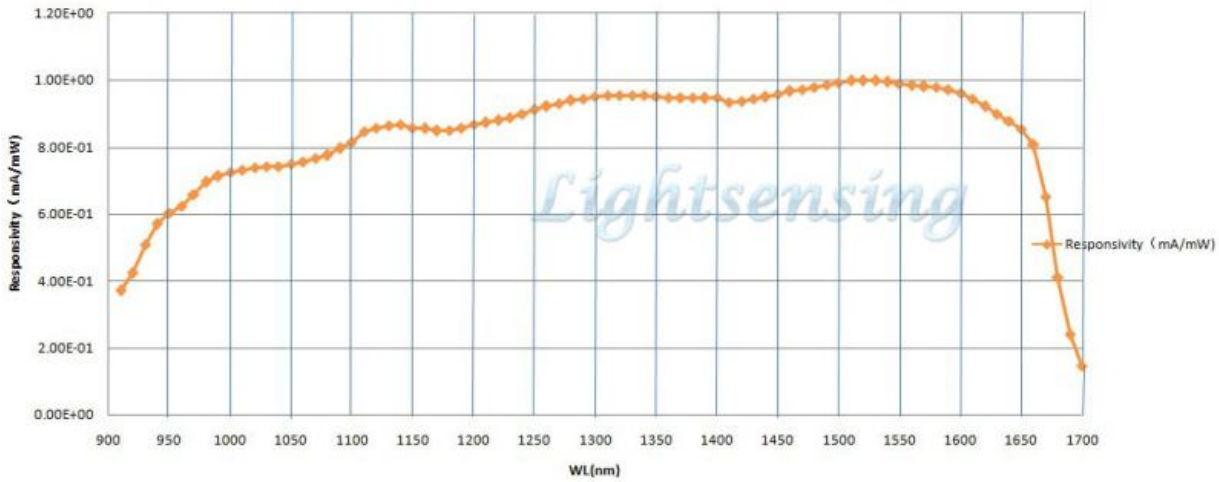'0   'L0   M0   M1

2JKFC   4JKFC   Fiber coupling
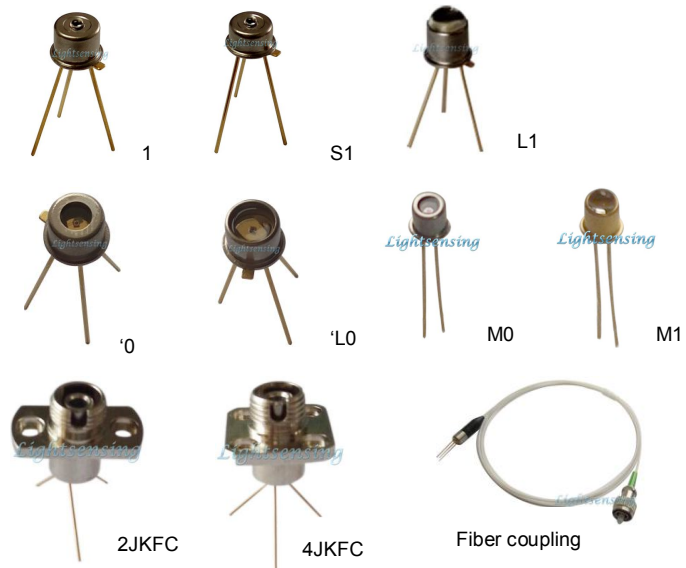
Absolute maximum ratings:

parameter	symbol	value	unit
Operating temperature	Top	-40～+85	℃
Storage temperature	Tstg	-40～+100	℃
Forward current	I_f	6	mA
Reverse voltage	V_r	20	V
Soldering temperature(time)	Ts（10s）	260	℃

Electrical and optical characteristics:(T=25℃)

parameter	symbol	unit	Value（typ.）
Active diameter	Φ	mm	0.3
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	Tr (R_L=50Ω,V_R=5V)	ns	0.8
Dark current	Id(V_R=0V)	pA	2
	Id(V_R=5V)	pA	20
Reverse Breakdown voltage	V_{BR} (I_R=10uA)	V	30
Junction capacitance	Cj (f=1MHz, V_R=0V)	pF	900
	Cj (f=1MHz, V_R=5V)	pF	5
Saturated Optical Power	Ps(V_R =5V)	mW	5
2nd Order Inter-modulation distortion	CSO(Two tones, R_L=50Ω,1mW, VR=5V)	dBc	-75
Operating voltage	V_R	V	0-10
Shunt resistance	Rsh (V_R=10mV)	GΩ	5
package	Hermetic TO46 Can or Mini TO Can or with receptacle or fiber coupling		

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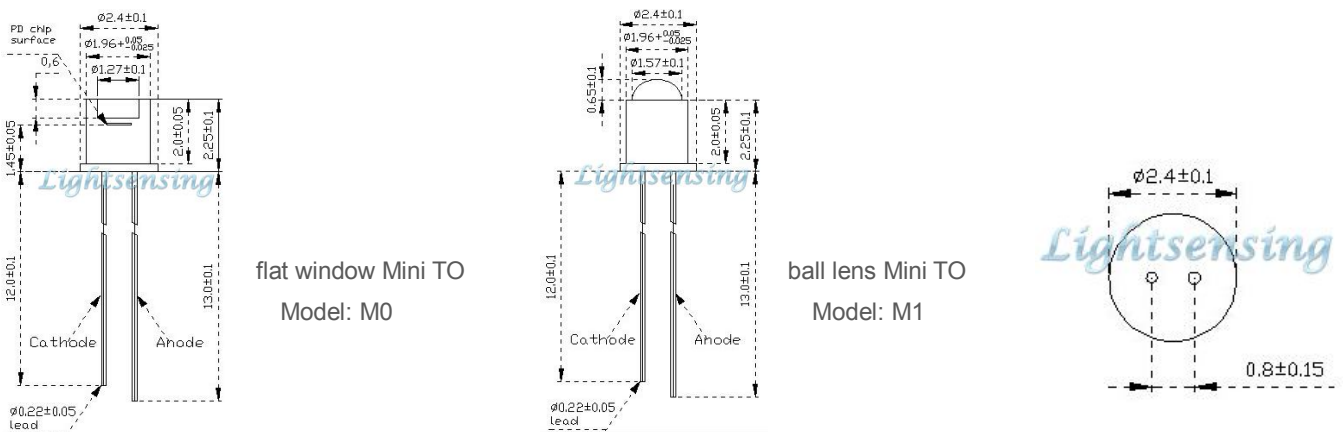
The typical Responsivity curve

TO46 TO package and Lead

2mm flat window TO
Model: 0

3mm flat window TO
Model: 03

large flat window TO
Model: L0

Short ball lens TO
Model: S1

Standard ball lens TO
Model: 1

Large ball lens TO
Model: L1

Type A   PIN description
Bottom View

Type B   PIN description
Bottom View
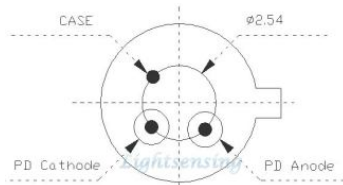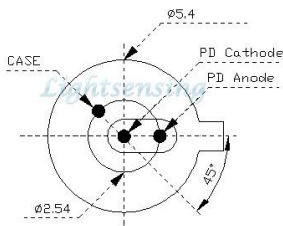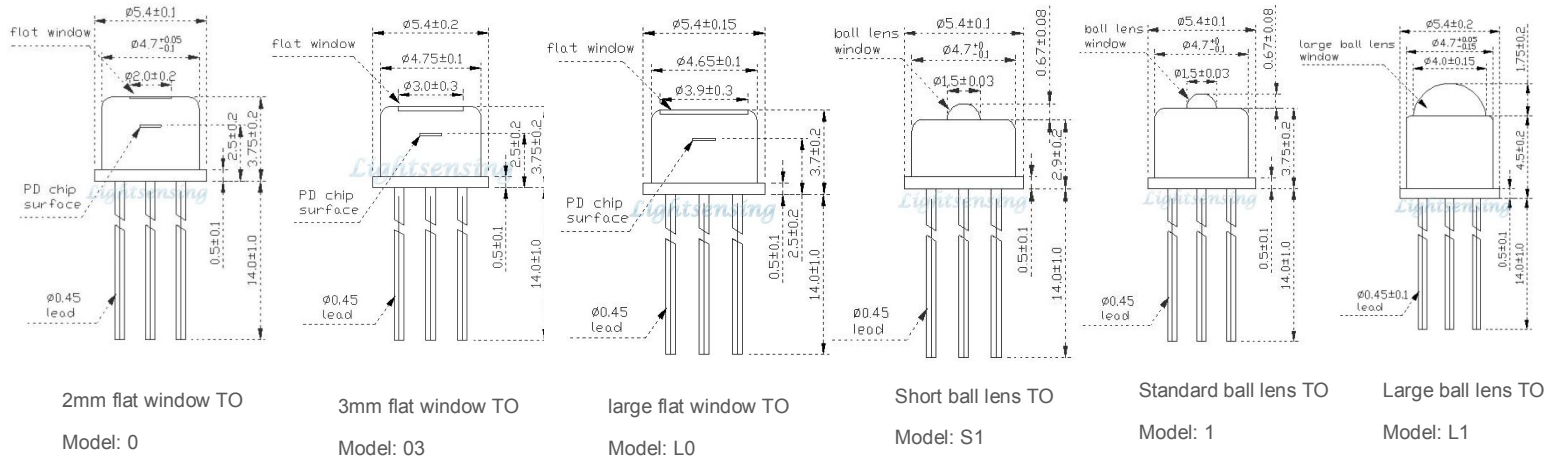
Mini-TO Can package and Lead

flat window Mini TO
Model: M0

ball lens Mini TO
Model: M1

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

TO46 package Order information

LSIPD-UL0.3-X-X

X=A	Type A PIN description	
X=B	Type B PIN description	

X=0	TO-46 Can with 2mm flat window cap
X=0A	TO-46 Can with 2mm flat window cap and Antireflection Coatings
X=03	TO-46 Can with 3mm flat window cap
X=L0	TO-46 Can with 3.9mm flat window cap
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=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=2JKFC-1	TO-46 Can with fixed receptacle with FC connector and 2 pieces of fix holes and better repeatability but with lower saturated power
X=4JKFC-1	TO-46 Can with fixed receptacle with FC connector and 4 pieces of fix holes and better repeatability but with lower saturated power
X=Other	By customer's request

Mini TO package Ordering information

LSIPD-UL0.3-X

X=M0	Mini TO Can with flat window cap
X=M1	Mini TO Can with ball lens window cap
X=M1-SMFA/P	Mini TO Can with SM Fiber coupling with FC-APC/FC-PC connector
X=M1-6MMFA/P	Mini TO Can with 62.5um MM Fiber coupling with FC-APC/FC-PC connector
X= M1-10MMFA/P	Mini TO Can with 105um MM Fiber coupling with FC-APC/FC-PC connector
X=M1-20MMFA/P	Mini TO Can with 200um MM Fiber coupling with FC-APC/FC-PC connector
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.