

1.2mm Silicon PIN photodiode

Version: 3.2 17-04-18

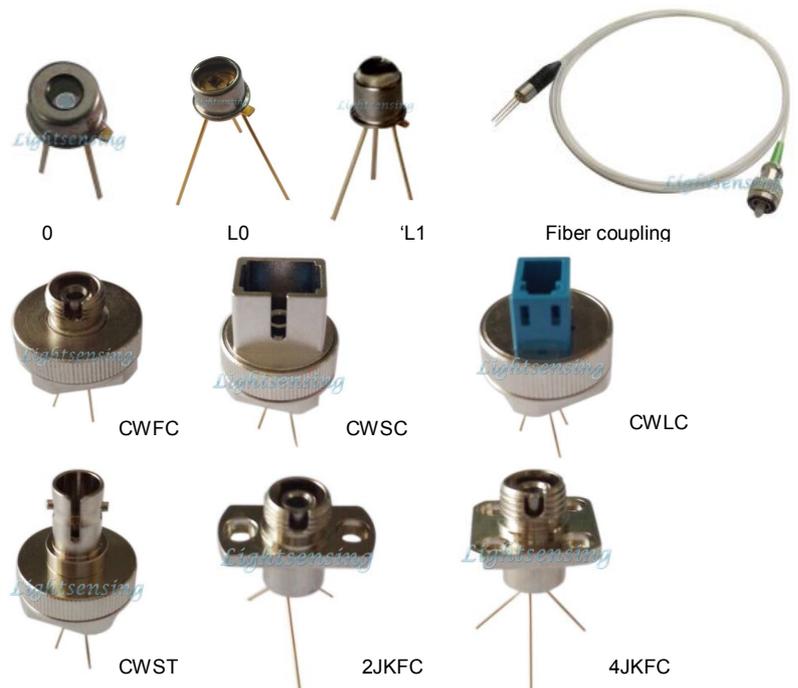
Model: LSSPD-1.2

Features:

- High reliability, low dark current
- 400-1100nm spectral range
- 1064nm responsivity up to 0.27mA/mW
- Active diameter 1.2x1.2mm
- Hermetic TO46 Can or with receptacle or with fiber coupling

Applications:

- Optical sensor and Optical power meter
- Laser finding range and laser lidar
- Industrial automatic control
- IR/ Laser light Monitoring
- Fluorescence detector
- Medical equipment



Absolute maximum ratings:

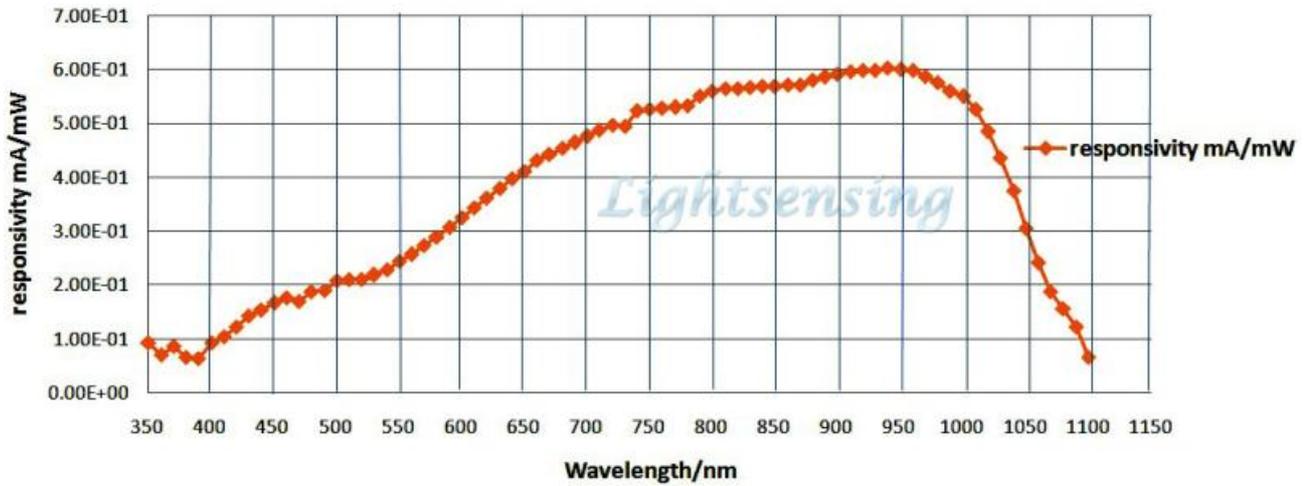
parameter	symbol	value	unit
Operating temperature	Top	-40~+85	°C
Storage temperature	Tstg	-40~+100	°C
Forward current	I _f	10	mA
Reverse voltage	V _r	30	V
Soldering temperature(time)	T _s (10s)	260	°C

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

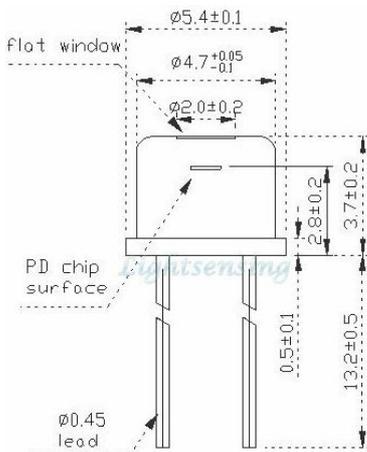
parameter	symbol	unit	Value(Typ.)
Active diameter	Φ	mm	1.2x1.2
Spectral range	λ	nm	400-1100
Responsivity	Re(V _R =5V,λ=405nm)	mA/mW	0.15
	Re(V _R =5V,λ=650nm)	mA/mW	0.30
	Re(V _R =5V,λ=850nm)	mA/mW	0.55
	Re(V _R =5V,λ=1064nm)	mA/mW	0.27
Response time	Tr (R _L =50Ω, V _R =5V)	ns	1.4
Dark current	Id(V _R =0V)	pA	0.2
	Id(V _R =5V)	pA	60
Reverse Breakdown voltage	V _{BR} (I _R =10μA)	V	80
Junction capacitance	C _j (f=1MHz, V _R =0V)	pF	50
	C _j (f=1MHz, V _R =5V)	pF	6
Saturated Optical Power	P _S (V _R =5V)	mW	15
Operating voltage	V _R	V	0-20
Shunt resistance	R _{sh} (V _R =10mV)	GΩ	50
package	Hermetic TO46 Can or with receptacle or with fiber coupling		

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

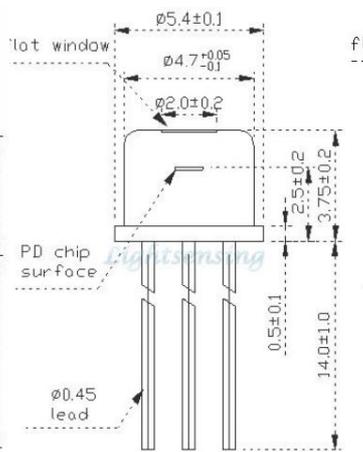
The typical Responsivity curve



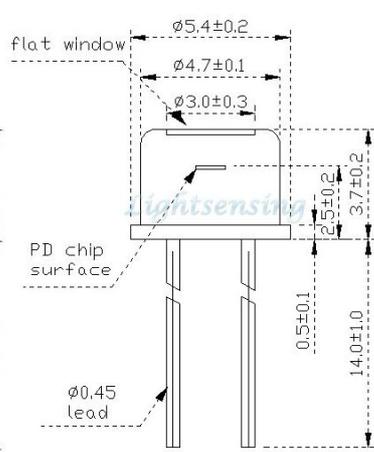
TO package and Lead



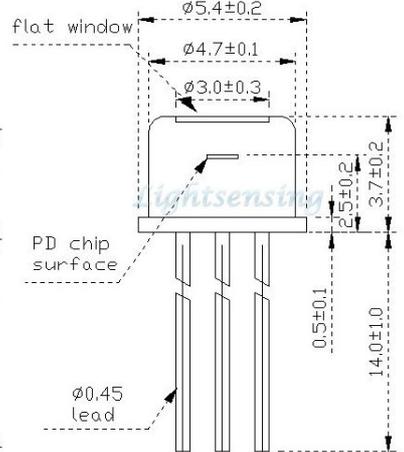
2mm Flat window 2PIN TO
Model: 0



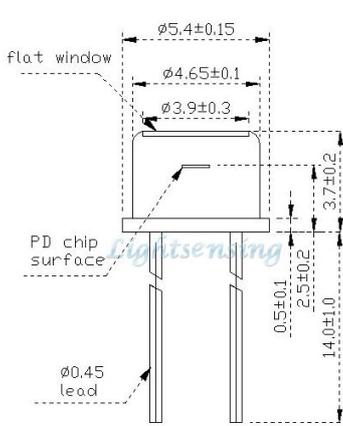
2mm Flat window 3PIN TO
Model: 0



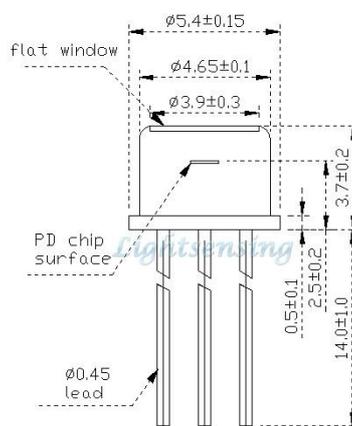
3mm Flat window 2PIN TO
Model: 03



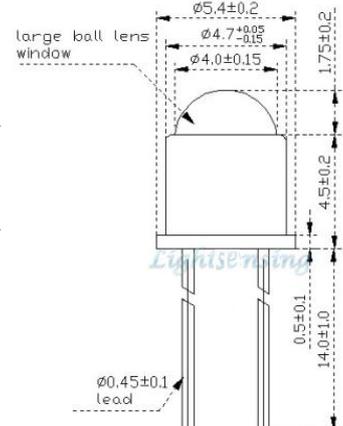
3mm Flat window 3PIN TO
Model: 03



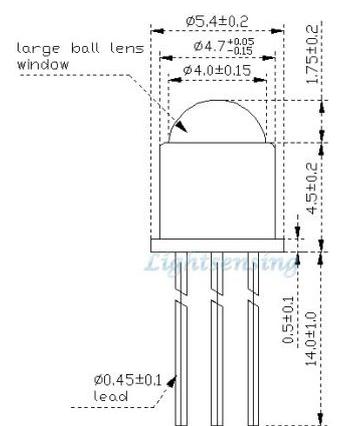
large flat window 2PIN TO
Model: L 0



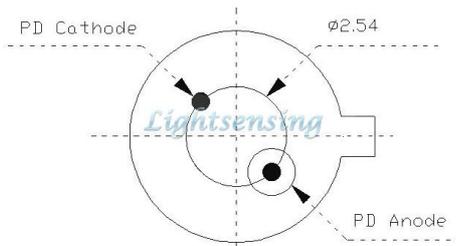
large flat window 3PIN TO
Model: L0



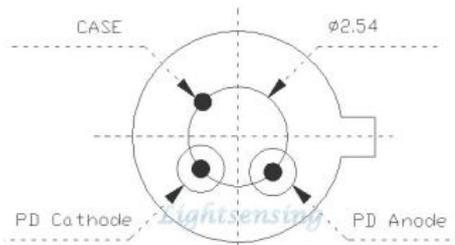
Large ball lens cap 2PIN TO
Model: L 1



Large ball lens cap 3PIN TO
Model: L1



2 PIN Bottom View



3 PIN B Type PIN description
Bottom View

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

Order information

LSSPD-1.2-X-X

X=2P 2 PIN out
X=3P 3 PIN out

X=0	TO-46 Can with 2mm Flat window cap
X=03	TO-46 Can with 3mm Flat window cap
X=L0	TO-46 Can with 3.9mm flat window cap
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=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=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. Example, We can provide photodiode with filter

The cautions

- 1: The above product specifications are subject to change without notice.
- 2: The suitable ESD protection is required in storage, transportation 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.