北京敏光科技有限公司 Beijing Lightsensing Technologies Ltd

800-2100nm 1mm InGaAs PIN Photodiode Version: 3.1 17-03-01

Model: LSIPD21-1

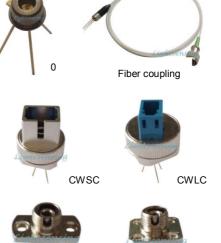
Features:

- Low noise, High reliability
- 800-2100nm wide wavelength range
- Active diameter 1mm
- Hermetic package TO46 Can or with receptacle or with fiber coupling

Applications:

- Gas Analyzer
- **Environment measurement**
- Optical sensor, Temperature sensing
- Covert IR sensing, Spectrography
- Medical and Chemical analysis
- Optical power meter, Space light detect equipment

Absolute maximum ratings:



2JKFC



CWFC





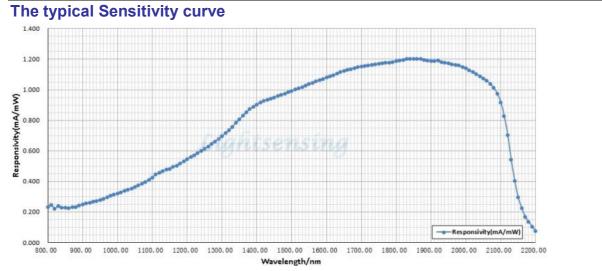
>	4.IKEC

parameter symbol value unit Operating temperature -40~+85 °C Тор Storage temperature -50~+125 °C Tstg Forward current I_{f} 10 mA **Reverse voltage** VR 1 V °C Soldering temperature(time) Ts (10s) 260

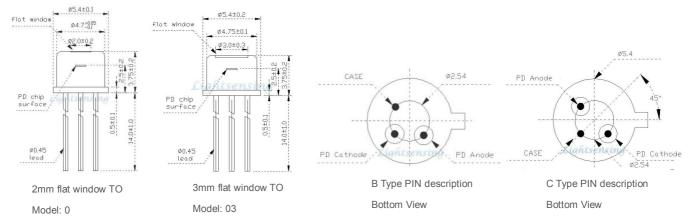
Electrical and optical characteristics:(T=25°C)

parameter	symbol	unit	Value (typ.)
Active diameter	Φ	mm	1
Spectral range	λ	nm	800-2100
Responsivity	Re (V _R =0.5V,λ=850nm)	mA/mW	0.23
	Re (V _R =0.5V,λ=1310nm)	mA/mW	0.7
	Re(V _R =0.5V,λ=1850nm)	mA/mW	1.2
	Re(V _R =0.5V,λ=2100nm)	mA/mW	0.9
Response time	Tr (R _L =50Ω, V _R =0.5V)	ns	15
Dark current	I _D (V _R =0V)	nA	6
	I _D (V _R =0.5V)	nA	70
Reverse Breakdown voltage	V _{BR} (I _R =10uA)	V	4
Junction capacitance	C _j (f=1MHz, V _R =0V)	pF	120
	C _j (f=1MHz, V _R =0.5V)	pF	100
Saturated Optical Power Ps(VR =0.5V)		mW	8
Operating voltage	V _R	V	0-0.5
Shunt impedance	hunt impedance Rsh (V _R =10mV)		0.5
package	Hermetic package TO46 Can or with receptacle or fiber coupling		

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



TO package and Lead



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

Order information

Ŭ		X=0	TO-46 Can with 2mm flat window cap
LS	SIPD21-1-X-X	X=03	TO-46 Can with 3mm flat window cap
		X=SMFA/P	TO-46 Can with SM Fiber coupling with FC-APC/FC-PC connector
В=В Ту	pe PIN description	X=SMSA	TO-46 Can with SM Fiber coupling with SC-APC connector
C=C Type PIN description	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

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.