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

# 800-2600nm 1mm InGaAs PIN Photodiode Version: 3.1 17-06-01

# Model: LSIPD26-1

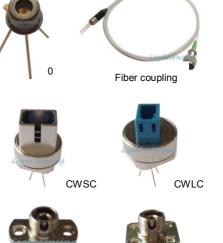
#### Features:

- Low noise, High reliability
- 800-2600nm 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



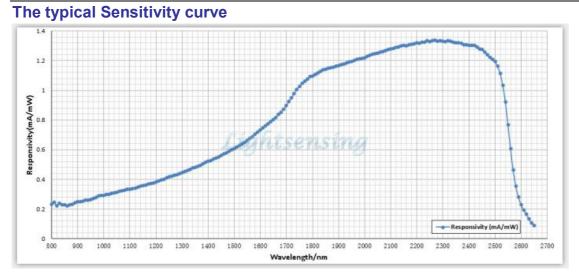


parameter	symbol	value	unit	
Operating temperature	Тор	-40~+85	$^{\circ}\mathrm{C}$	
Storage temperature	Tstg	-50~+125	°C	
Forward current	l <sub>f</sub>	10	mA	
Reverse voltage	VR	0.2	V	
Soldering temperature(time)	Ts (10s)	260	$^{\circ}$ C	

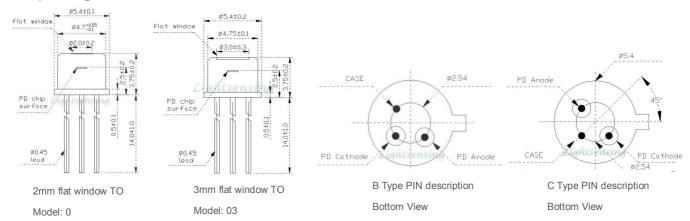
# Electrical and optical characteristics:(T=25°C)

parameter	symbol	unit	Value (typ.)
Active diameter	Φ	mm	1
Spectral range	λ	nm	800-2600
Responsivity	Re (V <sub>R</sub> =0.1V,λ=850nm )	mA/mW	0.21
	Re (V <sub>R</sub> =0.1V,λ=1310nm )	mA/mW	0.45
	Re(V <sub>R</sub> =0.1V,λ=2300nm)	mA/mW	1.3
	Re(V <sub>R</sub> =0.1V,λ=2600nm)	mA/mW	0.23
Response time	Tr (R <sub>L</sub> =50Ω, V <sub>R</sub> =0.1V)	ns	25
Dark current	I <sub>D</sub> (V <sub>R</sub> =0V)	uA	0.3
	I <sub>D</sub> (V <sub>R</sub> =0.1V)	uA	1
Reverse Breakdown voltage	V <sub>BR</sub> (I <sub>R</sub> =10uA)	V	1
Junction capacitance	C <sub>j</sub> (f=1MHz, V <sub>R</sub> =0V)	pF	150
	C <sub>j</sub> (f=1MHz, V <sub>R</sub> =0.1V)	pF	130
Saturated Optical Power	Ps(VR =0.1V)	mW	8
Operating voltage	V <sub>R</sub>	V	0-0.1
Shunt impedance	Rsh (V <sub>R</sub> =10mV)	ΚΩ	15
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**

	X=0	TO-46 Can with 2mm flat window cap
LSIPD26-1-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
B=B Type 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.