

800nm-4700nm 500um InGaAs PIN photodiode

Model: LSIPD47-0.5

Features:

- High reliability, low dark current
- Top illumination planar PD
- Cut off wavelength to 4700nm
- To-46 package



Applications:

- Gas Analyzer
- Environment measurement
- Science analysis and experiment
- Space light detect equipment
- Optical power meter
- NIR photometry
- Laser pulse test
- Optical fiber sensor



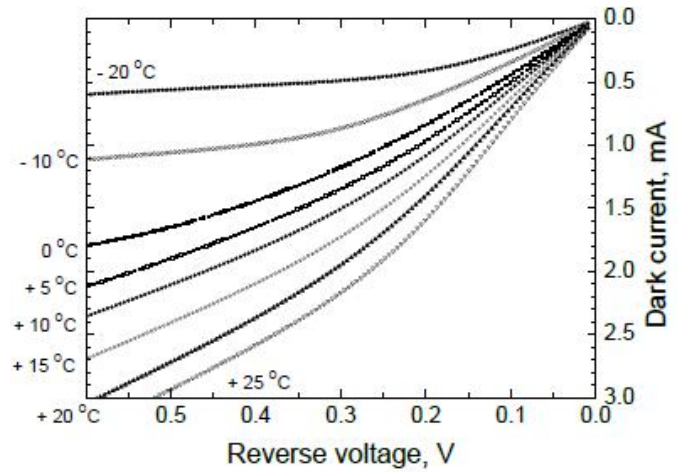
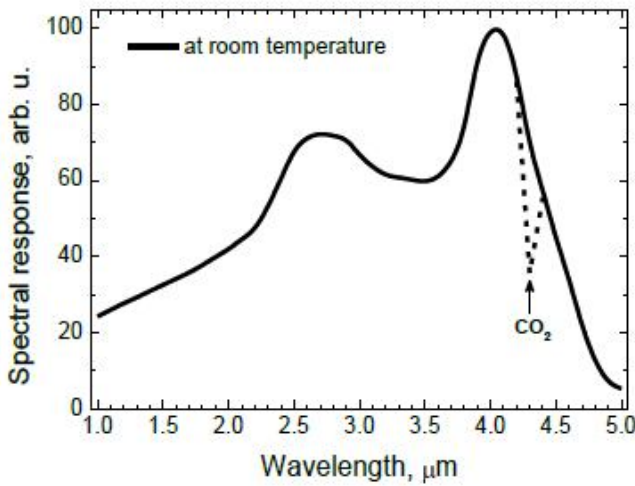
Absolute maximum ratings:

parameter	symbol	value	unit
Operating temperature	Top	-20~+40	°C
Storage temperature	Tstg	-55~+60	°C
Forward current	I _f	10	mA
Reverse voltage	V _r	0.5	V
Reverse current	I _r	1	mA
Soldering temperature(time)	T _s (10s)	260	°C

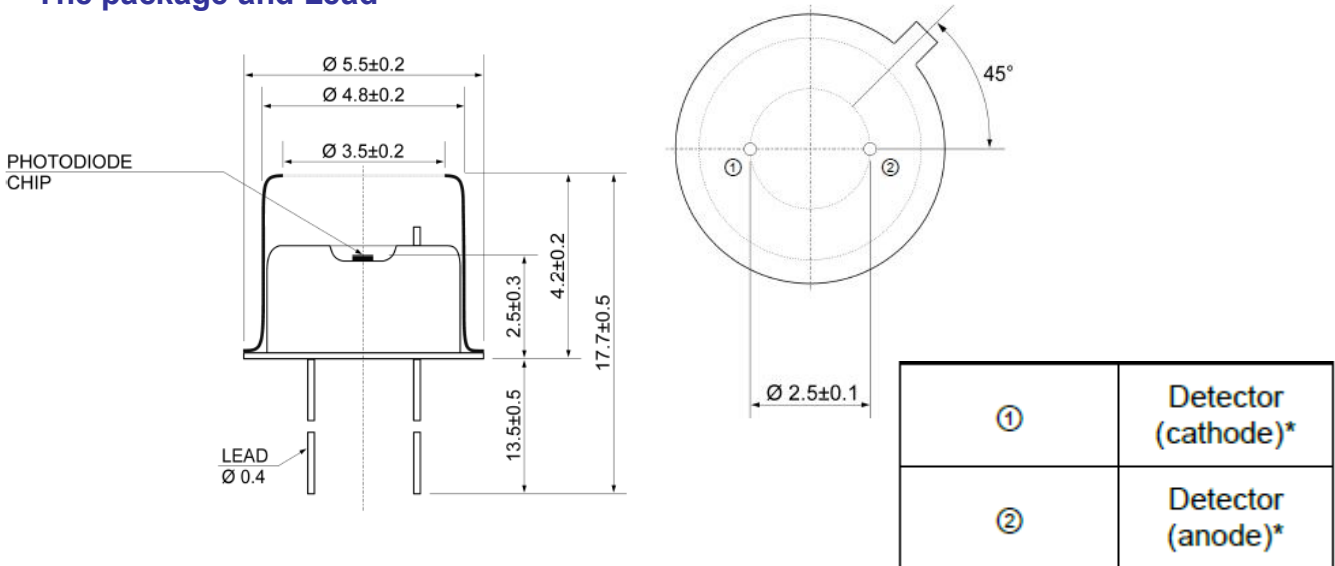
Electrical and optical characteristics:(T=25°C)

parameter	symbol	unit	Value (typ.)
Spectral range	λ	nm	800-4700
Active diameter	\varnothing	um	500
Responsivity	Re (V _R =-0.1V, λ =800nm)	mA/mW	0.08
	Re(V _R =-0.1V, λ =2500nm)	mA/mW	0.6
	Re(V _R =-0.1V, λ =4000nm)	mA/mW	1.0
	Re(V _R =-0.1V, λ =4700nm)	mA/mW	0.15
Rise time	T _r (R _L =50Ω, V _R =-0.1V)	ns	20
Dark current	I _D (V _R =-0.1V)	mA	1.5
Reverse Breakdown voltage	V _{BR} (I _R =10uA)	V	0.5
Junction capacitance	C _j (f=1MHz, V _R =-0.1V)	pF	50
Saturated Optical Power	P _s (V _R =-0.1V)	mW	2
Operating voltage	V _R	v	0-0.1
package	TO-46		

The typical characteristic curve



The package and Lead



Order information

LSIPD47-0.5-X

- X=0 TO-46 Can with flat window cap
- X=SMFP SM Fiber coupling with FC-PC connector
- X=SMFA SM Fiber coupling with FC-APC connector
- X=SMSA SM Fiber coupling with SC-APC connector
- X=5MMFA 50um MM Fiber coupling with FC-APC connector
- X=6MMFA 62.5um MM Fiber coupling with FC-APC connector
- X=JKFC TO-46 Can with FC receptacle
- X=Other By customer's request

The cautions

- 1: The suitable ESD protection is required in storage, transportation and using
- 2: 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.