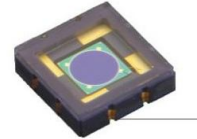


400nm-1700nm 1mm PIN InGaAs Photodiode

Model: LSIPD-1S

Features:

- Low noise, High reliability
- Top illumination planar PIN PD
- Lager active diameter 1mm
- Down to 400nm



Applications:

- Covert IR sensing
- Medical and Chemical analysis
- Spectrography
- Optical power meter
- Temperature sensing
- Light Detection and ranging



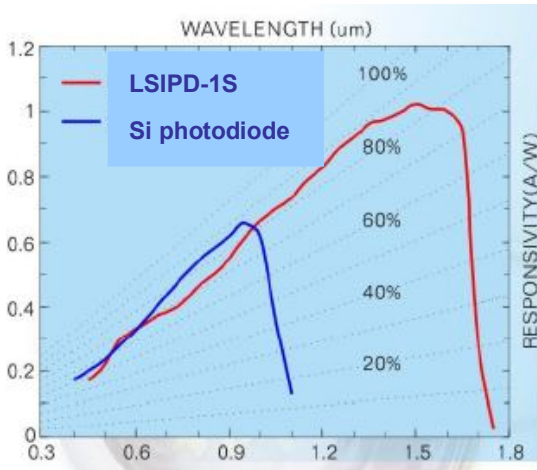
Absolute maximum ratings:

parameter	symbol	value	unit
Operating temperature	Top	-20~+85	°C
Storage temperature	Tstg	-40~+85	°C
Forward current	I _f	20	mA
Reverse current	I _r	10	mA
Soldering temperature(time)	Ts (10s)	260	°C

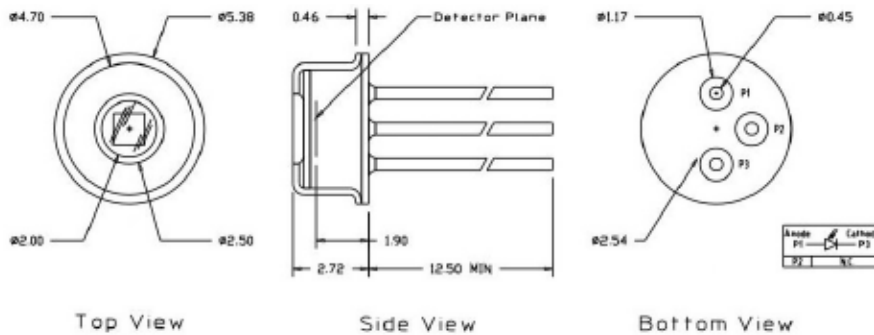
Electrical and optical characteristics:(T=25°C)

parameter	symbol	unit	Value (typ.)	
Active diameter	Φ	mm	1	
Package type			TO-46	Ceramic-1
Spectral range	λ	nm	400-1700	
Responsivity (V _R =0V)	R(λ=405nm)	mA/mW	0.09	
	R(λ=650nm)	mA/mW	0.3	
	R(λ=1550nm)	mA/mW	1.0	
	R(λ=1700nm)	mA/mW	0.15	
Dark current	I _D (-5V)	nA	5	
Reverse Breakdown voltage	V _{BR} (I _R =10uA)	V	20(max)	
Junction capacitance	C _j (f=1MHz,0V)	pF	80	170
Operating voltage	V _R	v	0-5	
Shunt resistance	Rsh	MΩ	50	
NEP@1550nm	Nep	PW/Hz ^{1/2}	0.02	

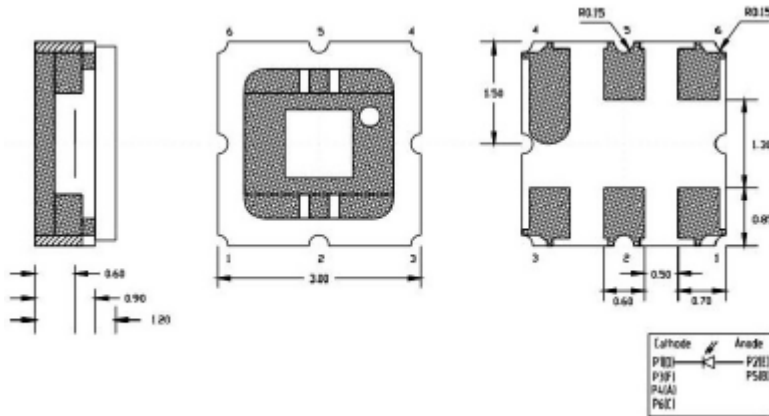
The typical Responsivity curve



The package and Lead



TO-46



Ceramic-1

Order information

LSIPD-1S- X



- | | | | |
|---------|--|-----|-------------------|
| X=0 | TO-46 Can with flat window cap | X=C | Ceramic-1 package |
| 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.