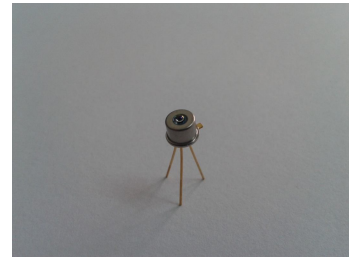


Ultra Low Dark Current InGaAs PIN photodiode

Model: LSIPD-LD-50

Features:

- High reliability, low dark current
- Top illumination planar PIN PD
- Ultra low dark current
- To-46 with ball lens cap



Applications:

- Industrial automatic control
- Science analysis and experiment
- Fiber optical sensor
- High precision optic instrument



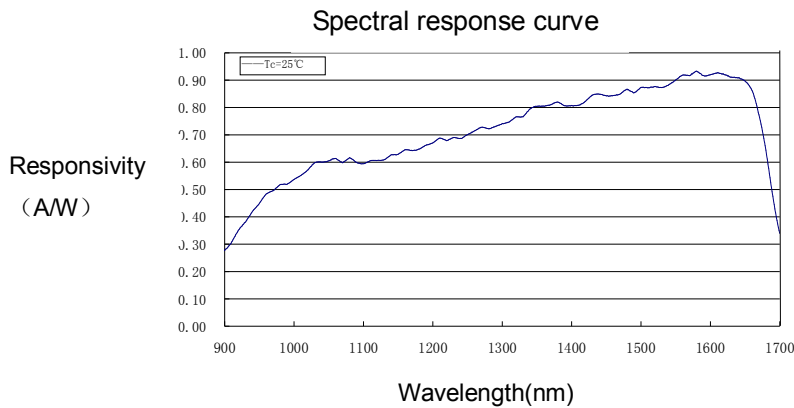
Absolute maximum ratings:

| 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 |
| Reverse current | I _r | 1 | mA |
| Soldering temperature(time) | T _s (10s) | 260 | °C |

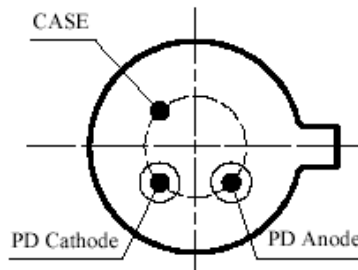
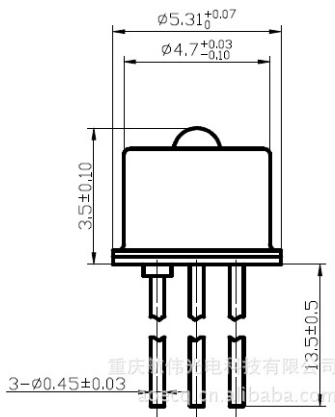
Electrical and optical characteristics:(T=25°C)

| parameter | symbol | unit | Value (typ.) |
|---------------------------------------|--|-------|--------------|
| Spectral range | λ | nm | 800-1700 |
| Responsivity | Re (V _R =5V, λ =1310nm) | mA/mW | 0.85 |
| | Re(V _R =5V, λ =1550nm) | mA/mW | 0.90 |
| Response time | Tr (R _L =50 Ω , V _R =5V) | ps | 170 |
| -3dBm Bandwidth | BW (R _L =50 Ω , V _R =5V,lead length=5mm) | GHz | >2 |
| Dark current | I _D (V _R =5V) | nA | 0.1 |
| | I _D (V _R =0V) | nA | 0.01 |
| 2nd Order Inter-modulation distortion | CSO(Two tones, R _L =50 Ω ,1mW, V _R =13V) | dBc | -60 |
| Reverse Breakdown voltage | V _{BR} (I _R =10uA) | V | 30 |
| Junction capacitance | C _j (f=1MHz, V _R =5V) | pF | 0.3 |
| Saturated Optical Power | P _s (V _R =5V) | mW | 2 |
| Operating voltage | V _R | v | 0-15 |
| package | TO-46 | | |

The typical Responsivity curve



The package and Lead



Bottom view

Order information

LSIPD-LD-50-X

- X=0 TO-46 Can with ball lens 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.