

# 3x8mm InGaAs PIN photodiode

V4.1LPD-010 20-10-01

Model: LSIPD-L3x8

## Features:

- High reliability, low dark current
- Top illumination Planar PIN PD
- Large Active diameter 3x8mm
- Hermetic TO8 Can or with receptacle

## Applications:

- Optical sensor
- Optical power meter
- Industrial automatic control
- Science analysis and experiment
- Space light detect equipment
- Response spectrum testing



0A



20CWFC



20CWSC



20CWST

## Absolute maximum ratings:

| parameter                   | symbol   | value    | unit |
|-----------------------------|----------|----------|------|
| Operating temperature       | Top      | -40~+85  | °C   |
| Storage temperature         | Tstg     | -40~+100 | °C   |
| Reverse voltage             | Vr       | 4        | V    |
| Soldering temperature(time) | Ts (10s) | 260      | °C   |

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

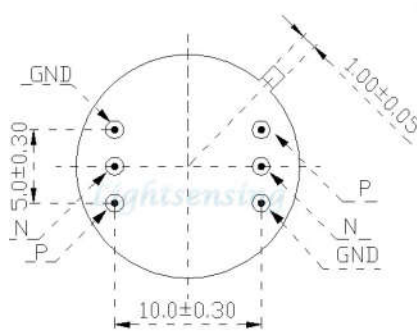
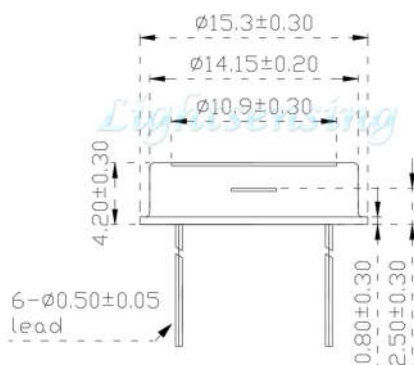
| parameter                 | symbol                              | unit       | Value (typ.) |
|---------------------------|-------------------------------------|------------|--------------|
| Active diameter           | $\Phi$                              | mm         | 3x8          |
| Spectral range            | $\lambda$                           | nm         | 800-1700     |
| Responsivity              | Re(Vr=0V, $\lambda$ =1310nm)        | mA/mW      | 0.85         |
|                           | Re(Vr=0V, $\lambda$ =1550nm)        | mA/mW      | 0.90         |
| Response time             | Tr (RL=50 $\Omega$ , Vr=2V)         | ns         | 400          |
| Dark current              | Id(Vr=0V)                           | nA         | 2            |
|                           | Id(Vr=2V)                           | nA         | 15           |
| Reverse Breakdown voltage | VBR (Id=10uA)                       | V          | 10           |
| Total capacitance         | Cj (f=1MHz, Vr=0V)                  | pF         | 6000         |
|                           | Cj (f=1MHz, Vr=2V)                  | pF         | 3000         |
| Saturated Optical Power   | Ps(Vr=0V)                           | mW         | 5(Min.3)     |
|                           | Ps(Vr=2V)                           | mW         | 15           |
| Reverse operating voltage | Vr                                  | V          | 0-2          |
| Shunt resistance          | Rsh (Vr=10mV)                       | M $\Omega$ | 5            |
| package                   | Hermetic TO8 Can or with receptacle |            |              |

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

## The typical Responsivity curve



## TO package and Lead



Bottom View

**Note:** For more information on dimension, please contact us.

## Order information

LSIPD-L3x8-X

|          |                                                                                        |
|----------|----------------------------------------------------------------------------------------|
| X=0      | TO8 Can with flat window Au cap <b>(Standard products)</b>                             |
| X=0A     | TO8 Can with flat window Au cap and Antireflection Coatings <b>(Standard products)</b> |
| X=20CWFC | TO8 Can with 20mm replaceable receptacle with FC connector                             |
| X=20CWSC | TO8 Can with 20mm replaceable receptacle with SC connector                             |
| X=20CWST | TO8 Can with 20mm replaceable receptacle with ST connector                             |
| 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.

