

InGaAs PIN PHOTODIODES

PD-1181

0.5 mm InGaAs PIN Photodiode with TO-46 Package

FEATURES

- ◇ High responsivity for dual windows at 1310 nm and 1550 nm
- ◇ Low dark current
- ◇ Hermetically sealed 3-pin TO-46 metal case
- ◇ Active diameter 0.5 mm

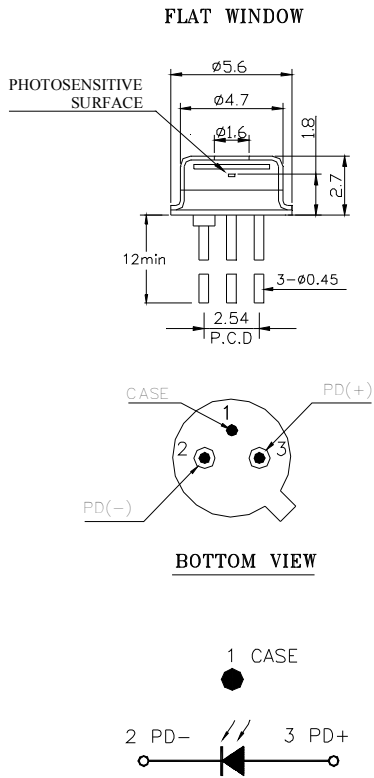
DESCRIPTION

PD-1181 InGaAs Photodiode is suited to receive the light at the wavelength range from 800 nm to 1650 nm. With high reliability, PD-1181 series are the best choice for power monitor application.

| ELECTRICAL AND OPTICAL CHARACTERISTICS (T _c =25°C) | | | | | | |
|---|------------------|------------------------------|------|------|------|------|
| Symbol | Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
| | Active Diameter | | | 0.5 | | mm |
| | Detection Range | | 800 | | 1650 | nm |
| R | Responsivity | V _R =5V, λ=1300nm | 0.85 | | - | A/W |
| | | V _R =5V, λ=1550nm | 0.9 | - | | |
| I _{dark} | Dark Current | V _R =5V | | 1 | 3 | nA |
| C | Capacitance | V _R =5V | | 30 | 50 | pF |
| R _{shunt} | Shunt Resistance | | 10 | | | MΩ |
| BW | Bandwidth | V _R =5V | 50 | | | MHz |

| ABSOLUTE MAXIMUM RATINGS (T _c =25 °C) | | | |
|--|-----------------------|---------|------|
| Symbol | Parameter | Ratings | Unit |
| P _o | Input Optical Power | 10 | mW |
| V _{RD} | Reverse Voltage | 15 | V |
| I _{FD} | Forward Current | 10 | mA |
| T _{opr} | Operating Temperature | -40~+85 | °C |
| T _{stg} | Storage Temperature | -40~+85 | °C |

MECHANICAL DIMENSION (mm) and PIN ASSIGNMENT



- Note:** 1. Specifications subject to change without notice.
 2. Other PIN assignment is available upon request.

ORDER INFORMATION

Part No.: P D - 1 1 8 1

Revision History

| Version | Subject | Release Date |
|---------|--|--------------|
| 1.0 | Initial datasheet | 2004/4/1 |
| 1.1 | Add the indication of photosensitive surface | 2009/4/9 |
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