

## GaAs PIN PD MODULES

## PD-8300 SERIES

GaAs PIN PHOTODIODE WITH 62.5/125  $\mu\text{m}$  MULTI-MODE FIBER PIGTAIL

### FEATURES

- ✧ High responsivity at 850 nm
- ✧ Low dark current
- ✧ Quick pulse response
- ✧ Coaxial Module with 50/125  $\mu\text{m}$  Multi-Mode Fiber: PD-8300
- ✧ Coaxial Module with 9/125  $\mu\text{m}$  Multi-Mode Fiber: PD-8310
- ✧ Coaxial Module with 62.5/125  $\mu\text{m}$  Multi-Mode Fiber: PD-8320

### APPLICATION

SDH, ATM, LAN

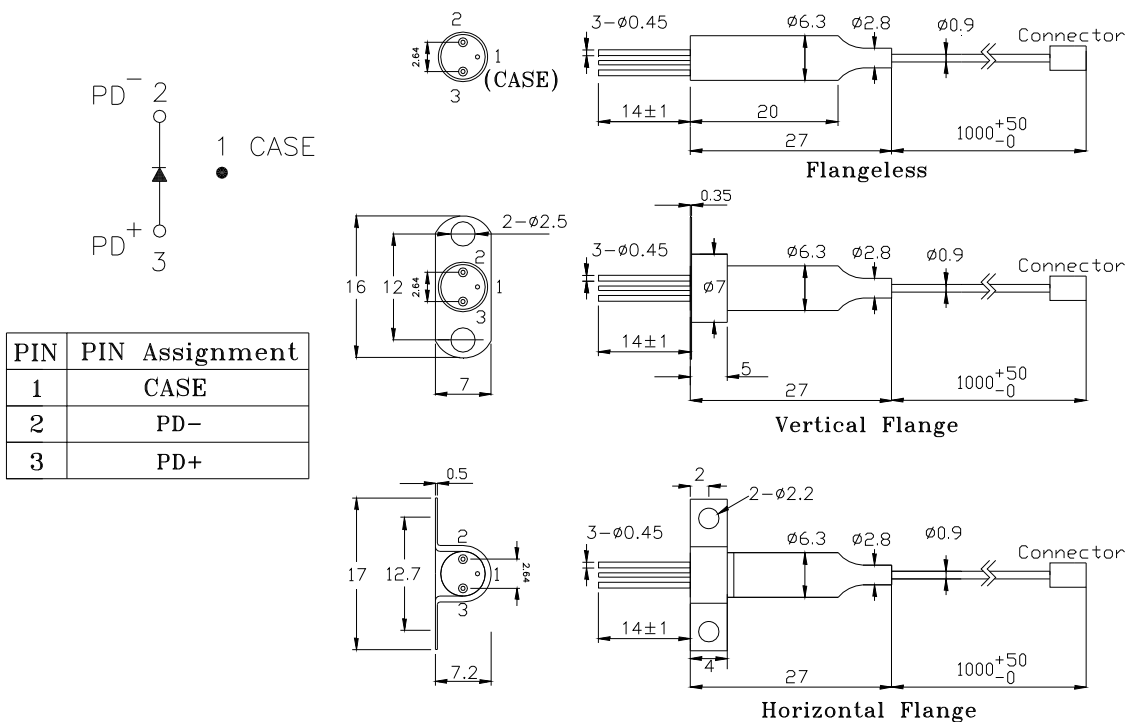
### DESCRIPTION

PD-8300 series are designed for coupling a multi-mode or single-mode fiber with high reliable GaAs PIN photodiodes. PD-8300 series are specially designed as detector for Datacom and Telecom application.

| ELECTRICAL AND OPTICAL CHARACTERISTICS (Tc=25°C) |                 |                               |      |      |      |      |
|--|-----------------|-------------------------------|------|------|------|------|
| Symbol   | Parameter       | Test Conditions               | Min. | Typ. | Max. | Unit |
|  | Detection Range | $\lambda$                     |      | 850  |      | nm   |
| R  | Responsivity    | VR=5V, $\lambda=850\text{nm}$ | 0.45 | 0.5  | -    | A/W  |
| Idark  | Dark Current    | VR=5V                         |      | 0.1  | 0.7  | nA   |
| C  | Capacitance     | VR=5V                         |      |      | 1.0  | pF   |
| Tr/Tf  | Rise/Fall Time  | VR=5V, 10~90%                 |      |      | 0.2  | ns   |
| BW   | Bandwidth       | VR=5V                         | 2    |      |      | GHz  |

| Absolute Maximum Ratings (Tc=25 °C) |                       |         |      |
|-------------------------------------|-----------------------|---------|------|
| Symbol                              | Parameter             | Ratings | Unit |
| Po                                  | Input Optical Power   | 2       | mW   |
| VRD                                 | PD Reverse Voltage    | 20      | V    |
| IFD                                 | PD Forward Current    | 2       | mA   |
| Topr                                | Operating Temperature | -40~+85 | °C   |
| Tstg                                | 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 - 8 3  0 -

| Code | Fiber       |
|------|-------------|
| 0    | 50/125 μm   |
| 1    | 9/125 μm    |
| 2    | 62.5/125 μm |

| Code | Flange     |
|------|------------|
| V    | Vertical   |
| H    | Horizontal |
| X    | No Flange  |

| Code | Connector Type |
|------|----------------|
| S    | SC/PC          |
| F    | FC/PC          |
| T    | ST/PC          |
| X    | No Connector   |
| SA   | SC/APC         |
| FA   | FC/APC         |

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Revision History

| Version | Subject           | Release Date |
|---------|-------------------|--------------|
| 1.0     | Initial datasheet | 2007/6/1     |
|         |                   |              |
|         |                   |              |