

Features

- Large sensitive area
- Low voltage operation
- Custom designed large area photodiode available

Applications

- Laser power monitors
- Laser diode and LED aging equipment
- Near infrared sensing system
- Power meters

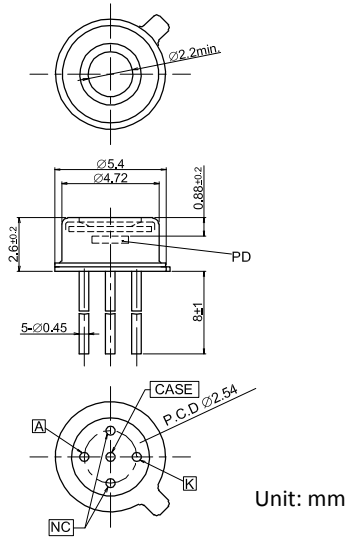
Absolute Maximum Ratings

| Parameter | Symbol | Value | Unit | Note |
|-----------------------|-----------|------------|------|------------------------|
| Reverse voltage | V_R | 2 | V | |
| Reverse current | I_R | 50 | mA | |
| Forward current | I_F | 50 | mA | |
| Operating temperature | T_{opr} | -20 to +70 | °C | Avoid dew condensation |
| Storage temperature | T_{stg} | -20 to +80 | °C | Avoid dew condensation |

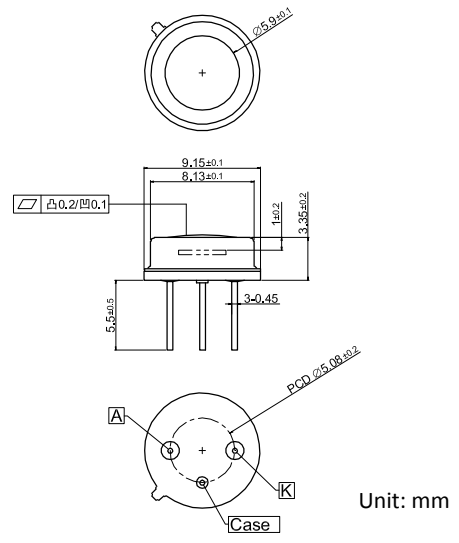
Electrical and Optical Characteristics ($T_a=25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Test Condition |
|-------------------|--------|------|------|------|---------------|--|
| Active diameter | D | 1.5 | | | mm | KPDE150 |
| | | 3.0 | | | mm | KPDE300 |
| Responsivity | R | 0.8 | 0.9 | - | A/W | $\lambda=1310\text{nm}$, $V_R=1\text{V}$ |
| | | 0.9 | 1.0 | - | | $\lambda=1550\text{nm}$, $V_R=1\text{V}$ |
| Dark current | I_D | - | 1 | - | μA | KPDE150, $V_R=1\text{V}$ |
| | | - | 1 | - | | KPDE300, $V_R=1\text{V}$ |
| Total capacitance | C_t | - | 0.15 | - | nF | KPDE150, $V_R=1\text{V}$, $f=1\text{MHz}$ |
| | | - | 1 | - | | KPDE300, $V_R=1\text{V}$, $f=1\text{MHz}$ |

KPDE150-H45



KPDE300-H53



- Specifications , characteristics, data, materials, structures specified in this datasheet are subject to change without notice. Please refer to the latest specification before use of the products.
- Products listed in this datasheet comply with the RoHS Directive (EU2002/95/EC).

Opto-technologies for the Future



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