

# Si Photodiode

# KPD3065C

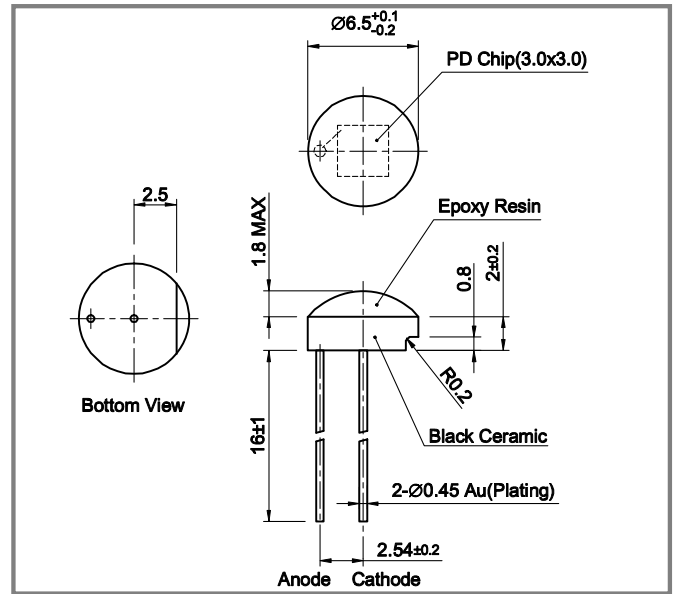
### Features

- Transparent epoxy potting
- High sensitivity

### Applications

- Optical switches
- Optical encoders
- Pulse detectors
- Sensors and industrial controls

### Dimensions (unit: mm)



### Absolute Maximum Ratings

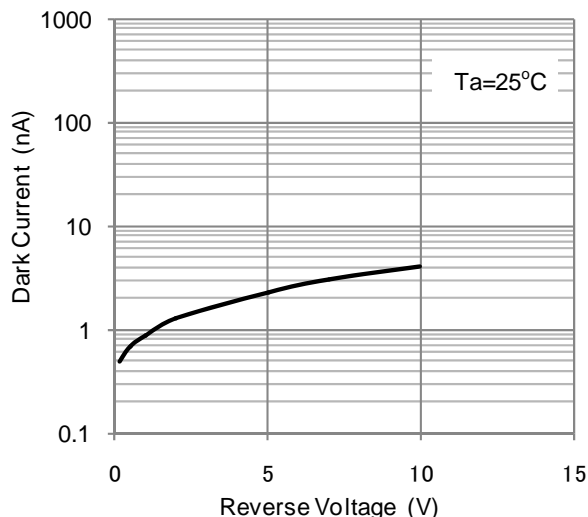
| Parameter             | Symbol    | Value       | Unit | Note                   |
|-----------------------|-----------|-------------|------|------------------------|
| Reverse voltage       | $V_R$     | 10          | V    |                        |
| Reverse current       | $I_R$     | 1           | mA   |                        |
| Forward current       | $I_F$     | 10          | mA   |                        |
| Operating temperature | $T_{opr}$ | -20 to +80  | °C   | Avoid dew condensation |
| Storage temperature   | $T_{stg}$ | -20 to +100 | °C   | Avoid dew condensation |

### Electrical and Optical Characteristics (Ta=25 °C unless otherwise noted)

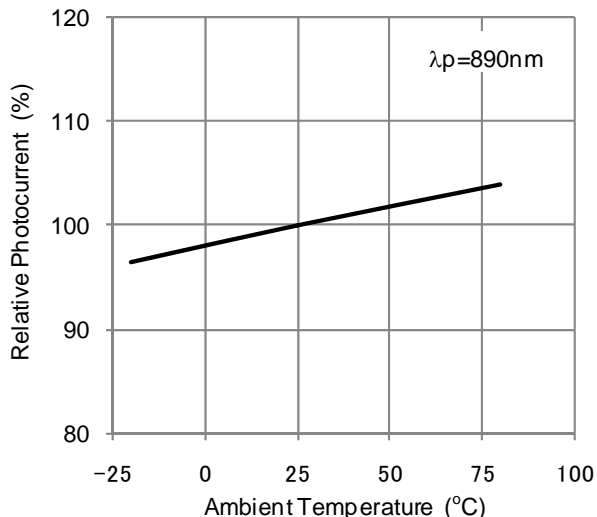
| Parameter             | Symbol    | Min.        | Typ.               | Max  | Unit            | Test Conditions              |
|-----------------------|-----------|-------------|--------------------|------|-----------------|------------------------------|
| Active area           | S         | 2.59 x 2.59 |                    |      | mm <sup>2</sup> |                              |
| Operating voltage     | $V_{opr}$ | -           | -                  | 5    | V               |                              |
| Sensitive wavelength  | $\lambda$ | 400         | 950( $\lambda_p$ ) | 1000 | nm              | $\lambda_p$ =Peak wavelength |
| Open circuit voltage  | $V_{op}$  | -           | 350                | -    | mV              | 1000lx @2856K                |
| Short circuit current | $I_{sh}$  | 60          | -                  | 85   | $\mu$ A         | 1000lx @2856K                |
| Dark current          | $I_D$     | -           | -                  | 30   | nA              | $V_R=5V$                     |
| Terminal capacitance  | $C_t$     | -           | 30                 | -    | pF              | $V_R=5V, f=1MHz$             |

Specifications are subject to change without notice.

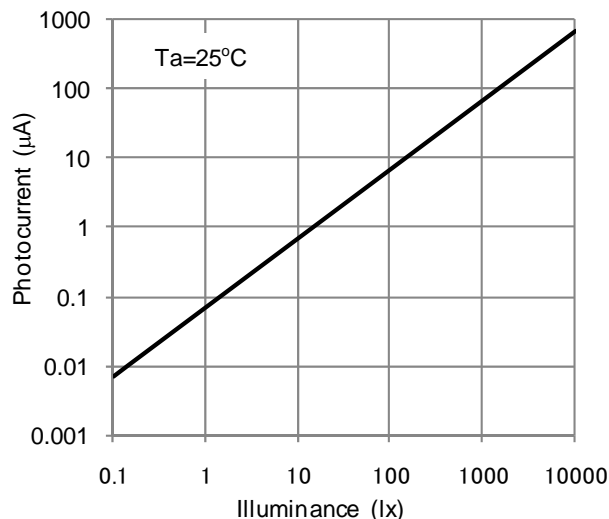
**Dark Current - Reverse Voltage**



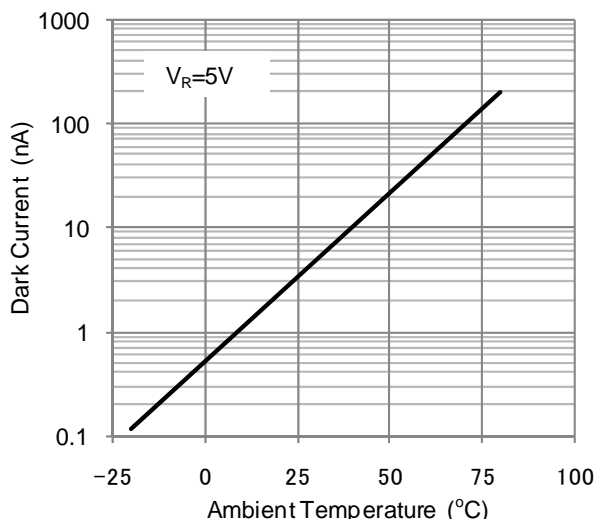
**Photocurrent - Ambient Temperature**



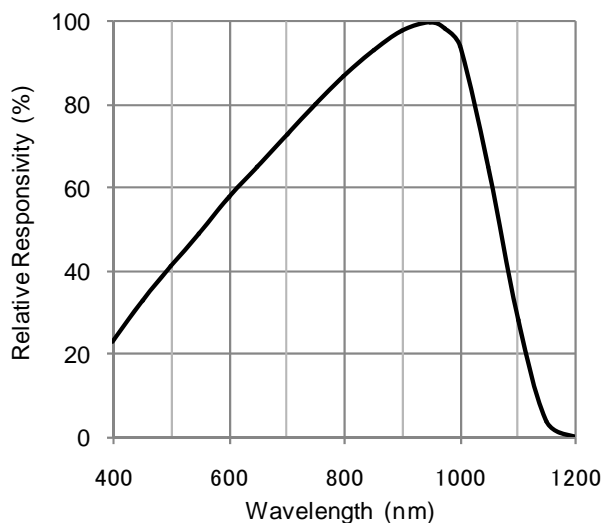
**Photocurrent - Illuminance**



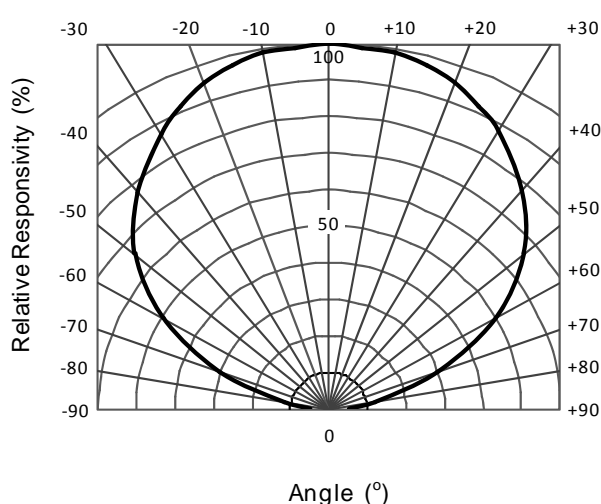
**Dark Current - Ambient Temperature**



**Spectral Responsivity**



**Directivity**



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**Contacts:**

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