

## PHOTODIODE

Si photodiode  
**S8265**

Visible sensitivity photodiode with high humidity resistance



## Features

- High humidity resistance (85 °C, 85 %, 1000 h)
- Visible-compensation filter
- Ceramic package (6 × 8 mm)
- Active area: 2.8 × 2.4 mm

## Applications

- Light dimmer in locations at high humidity or for outdoor use

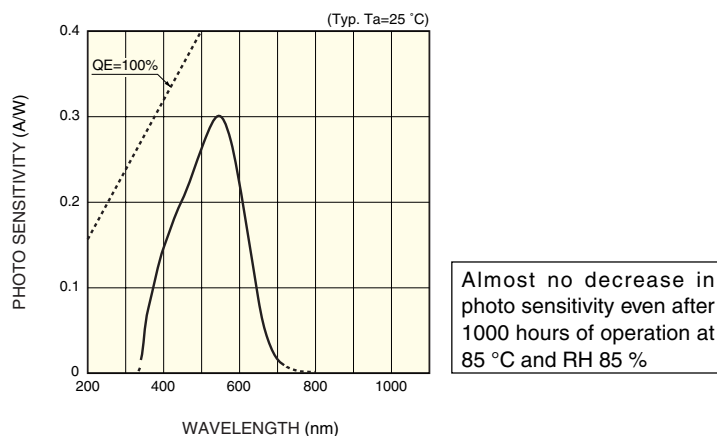
## ■ Absolute maximum ratings (Ta=25 °C)

| Parameter             | Symbol              | Value      | Unit |
|-----------------------|---------------------|------------|------|
| Reverse voltage       | V <sub>R</sub> Max. | 10         | V    |
| Operating temperature | T <sub>opr</sub>    | -25 to +85 | °C   |
| Storage temperature   | T <sub>stg</sub>    | -40 to +85 | °C   |

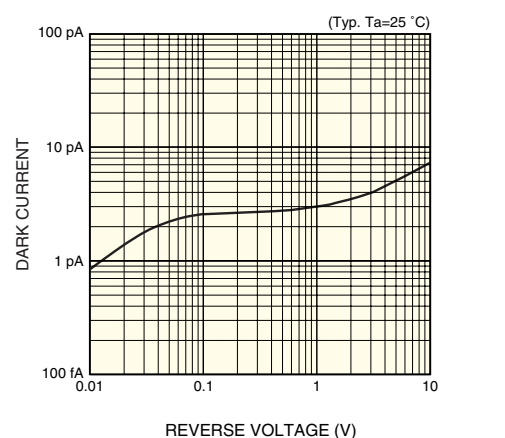
## ■ Electrical and optical characteristics (Ta=25 °C)

| Parameter                   | Symbol          | Condition                                         | Min. | Typ.       | Max. | Unit    |
|-----------------------------|-----------------|---------------------------------------------------|------|------------|------|---------|
| Spectral response range     | $\lambda$       |                                                   | -    | 340 to 720 | -    | nm      |
| Peak sensitivity wavelength | $\lambda_p$     |                                                   | -    | 540        | -    | nm      |
| Photo sensitivity           | S               | $\lambda = \lambda_p$                             | -    | 0.3        | -    | A/W     |
| Short circuit current       | I <sub>sc</sub> | 100 k $\Omega$ , 2856 K                           | 0.40 | 0.52       | -    | $\mu$ A |
| Dark current                | I <sub>D</sub>  | V <sub>R</sub> =1 V                               | -    | 3          | 20   | pA      |
| Rise time                   | t <sub>r</sub>  | V <sub>R</sub> =0 V, R <sub>L</sub> =1 k $\Omega$ | -    | 0.5        | -    | $\mu$ s |
| Terminal capacitance        | C <sub>t</sub>  | V <sub>R</sub> =0 V, f=10 kHz                     | -    | 230        | -    | pF      |

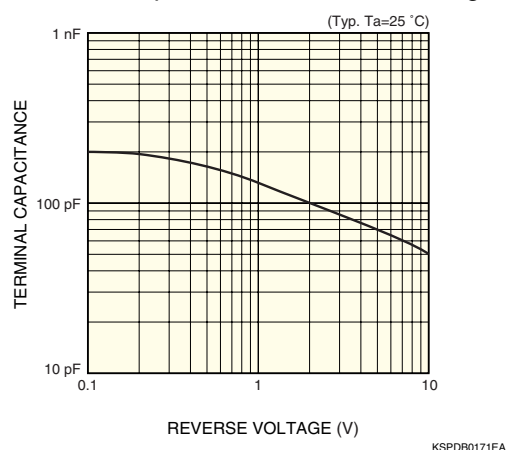
## ■ Spectral response



## ■ Dark current vs. reverse voltage



## ■ Terminal capacitance vs. reverse voltage



## ■ Dimensional outline (unit: mm)

