

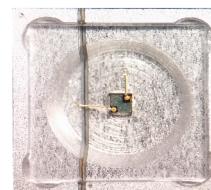
UV-C Sensor

GUVC-S10GD



Features

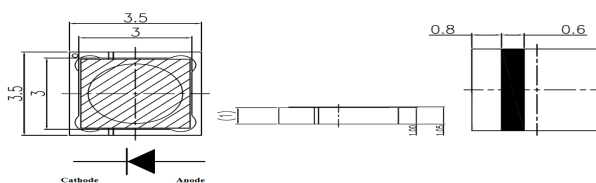
- Aluminium Gallium Nitride Based Material
- Schottky-type Photodiode
- Photovoltaic Mode Operation
- Good Solar Blindness



Applications

- Pure UV-C Monitoring
- Sterilization Lamp Monitoring

Outline Diagrams and Dimensions



Absolute Maximum Ratings

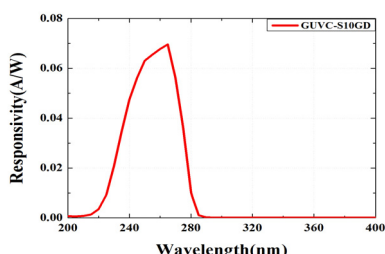
| Parameter | Symbol | Min. | Max. | Unit | Remark |
|----------------------------|---------------|------|------|-------------------|----------------|
| Storage Temperature | T_{st} | -40 | 90 | °C | |
| Operating Temperature | T_{op} | -30 | 85 | °C | |
| Reverse Voltage | $V_{r, max.}$ | | 3 | V | |
| Forward Current | $I_{f, max.}$ | | 1 | mA | |
| Optical Source Power Range | P_{opt} | 0.1μ | 100m | W/cm ² | UVC Lamp |
| Soldering Temperature | T_{sol} | | 260 | °C | within 10 sec. |

※Notice: apply to us in the case that Optical Source Power is over 100mW/cm².

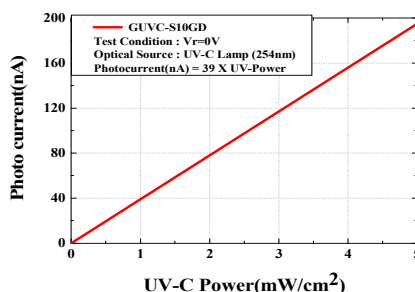
Characteristics (at 25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|--------------------------|-----------|------|-------|------|-----------------|-------------------------------|
| Dark Current | I_d | | | 1 | nA | $V_r = 0.1 V$ |
| Photo Current | I_{ph} | 35 | 39 | 42 | nA | UVC Lamp, 1mW/cm ² |
| Temperature Coefficient | I_{tc} | | -0.07 | | %/°C | UVC Lamp |
| Responsivity | R | | 0.07 | | A/W | $\lambda = 254 nm, V_r = 0 V$ |
| Spectral Detection Range | λ | 220 | | 280 | nm | 10% of R |
| Active area | | | 0.076 | | mm ² | |

Responsivity Curve



Photocurrent along UV Power



Caution

ESD can damage the device hence please avoid ESD.