

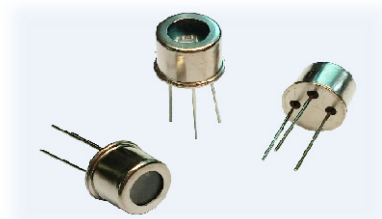
# UV Sensor Module

## GUVB-T21GH



### Features

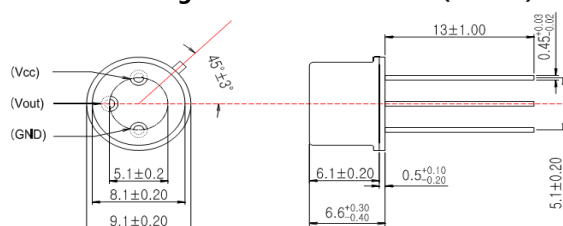
- Single Supply Voltage Operation
- Amplified Voltage Output
- High Sensitivity and Good Solar Blindness
- Small and Compact Size



### Applications

- UV-B Lamp Monitoring
- UV Index monitoring

### Outline Diagrams and Dimensions(unit:mm)



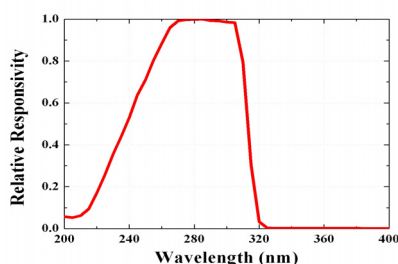
### Absolute Maximum Ratings

| Parameter             | Symbol           | Min. | Max. | Unit | Remark         |
|-----------------------|------------------|------|------|------|----------------|
| Storage Temperature   | T <sub>st</sub>  | -40  | 90   | °C   |                |
| Operating Temperature | T <sub>op</sub>  | -30  | 85   | °C   |                |
| Supply Voltage        | V <sub>cc</sub>  |      | 5.5  | V    |                |
| Soldering Temperature | T <sub>sol</sub> |      | 260  | °C   | within 10 sec. |

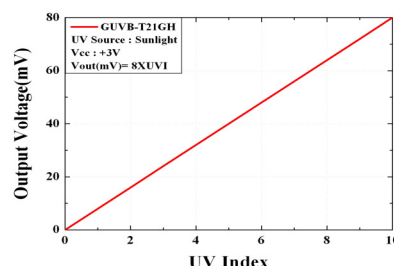
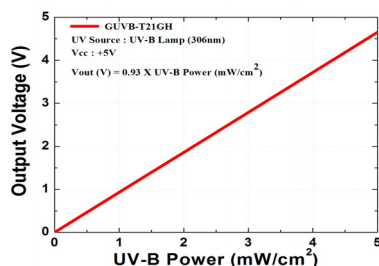
### Characteristics (at 25°C)

| Parameter                | Symbol           | Min. | Typ. | Max. | Unit               | Remark                |
|--------------------------|------------------|------|------|------|--------------------|-----------------------|
| Supply Voltage           | V <sub>cc</sub>  | 1.8  |      | 5.5  | V                  | DC                    |
| Supply Current           | I <sub>Q</sub>   |      | 50   |      | μA                 |                       |
| Responsivity             | R <sub>p</sub>   |      | 1.3  |      | mV/nW              | at 300 nm             |
| Spectral Detection Range | λ                | 220  |      | 320  | nm                 | 10% of R <sub>p</sub> |
| Output Voltage           | V <sub>out</sub> |      | 0.93 |      | V                  | 1 mW/cm <sup>2</sup>  |
|                          |                  |      | 8    |      | mV                 | 1 UVI                 |
| Detection Power Range    | P                | 0    |      | 5.38 | mW/cm <sup>2</sup> | V <sub>cc</sub> =5V   |
| Rising Time              | T <sub>r</sub>   |      | 3    |      | ms                 |                       |

### Responsivity Curve



### Output Voltage along UV Power



**Caution** ESD can damage the device hence please avoid ESD.