

# UV-B Sensor GUVB-T21GD-U

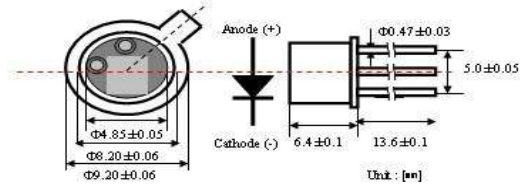


- Features**
- Aluminium Gallium Nitride Based Material
  - Schottky-type Photodiode
  - Photovoltaic Mode Operation
  - Good Visible Blindness
  - High Responsivity & Low Dark Current



- Applications**
- UV-B Lamp Monitoring
  - UV-B LED Monitoring

### Outline Diagrams and Dimensions



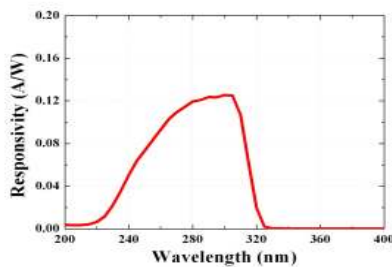
### Absolute Maximum Ratings

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	
Soldering Temperature	$T_{sol}$		260	°C	within 10 sec.

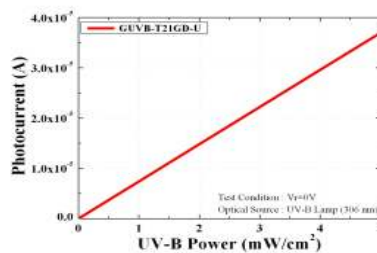
### Characteristics (at 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	$I_d$			10	nA	$V_r = 0.1$ V
Photo Current	$I_{ph}$		7.4		μA	UVB Lamp, 1 mW/cm <sup>2</sup>
Temperature Coefficient	$I_{tc}$		0.1		%/°C	UVB Lamp
Responsivity	R		0.13		A/W	$\lambda = 300$ nm, $V_r = 0$ V
Spectral Detection Range	$\lambda$	220		320	nm	10% of R

### Responsivity Curve



### Photocurrent along UV Power



### Caution