

# UV-C LED Sensor

## GUVCL-T10GD

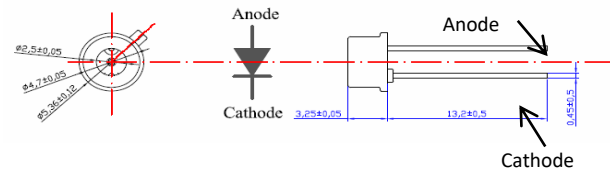


- Features**
- Aluminium Gallium Nitride Based Material
  - Schottky-type Photodiode
  - Photovoltaic Mode Operation
  - Good Solar Blindness



- Applications**
- UV-C LED Monitoring (265,270,280nm)**
  - Pure UV-C Monitoring
  - Sterilization Lamp Monitoring

### Outline Diagrams and Dimensions



### Absolute Maximum Ratings

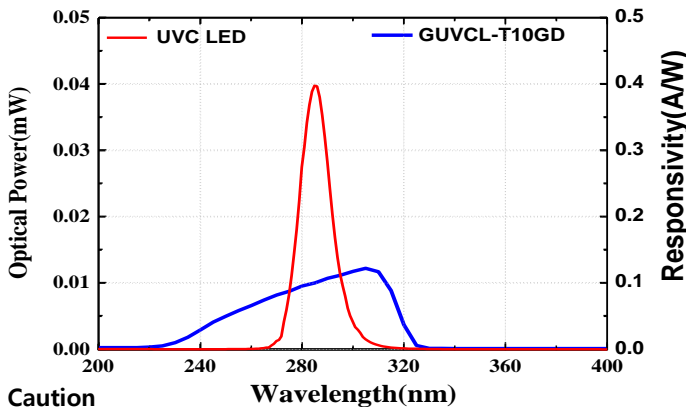
Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	$T_{st}$	-40	90	$^{\circ}C$	
Operating Temperature	$T_{op}$	-30	85	$^{\circ}C$	
Reverse Voltage	$V_{r, max.}$		3	V	
Forward Current	$I_{f, max.}$		1	mA	
Optical Source Power Range	$P_{opt}$	0.01	100	$mW/cm^2$	UVC LED
Soldering Temperature	$T_{sol}$		260	$^{\circ}C$	within 10 sec.

※Notice: apply to us in the case that Optical Source Power is over 100,000 $\mu W/cm^2$ .

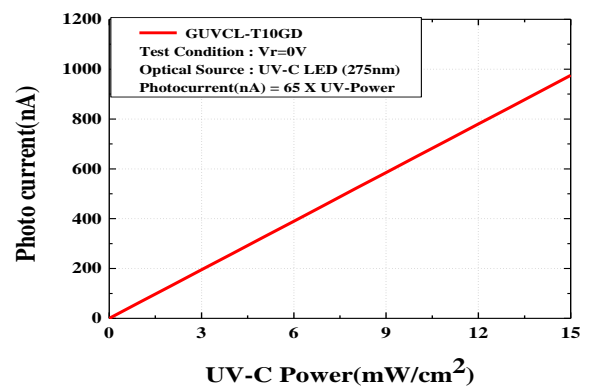
### Characteristics (at 25 $^{\circ}C$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	$I_d$			1	nA	$V_r = 0.1$ V
Photo Current	$I_{ph}$	58	65	72	nA	UVC LED, 1 $mW/cm^2$
Temperature Coefficient	$I_{tc}$		0.1		%/ $^{\circ}C$	UVC LED
Responsivity	R		0.1		A/W	$\lambda = 280$ nm, $V_r = 0$ V
Spectral Detection Range	$\lambda$	230		320	nm	10% of R
Active area			0.076		$mm^2$	

### Responsivity Curve



### Output Voltage along UV Power



### Caution

ESD can damage the device hence please avoid ESD. Insulate the cap of TO-CAN or it can cause malfunction of the device.