

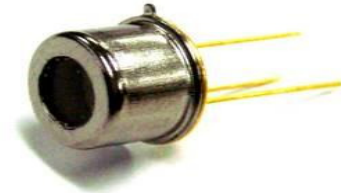


# UV-C Sensor

## GUVC-T20GD-U

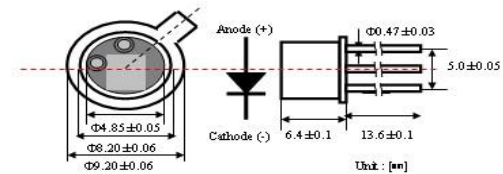


- Features**
- Aluminium Gallium Nitride Based Material
  - Schottky-type Photodiode
  - Photovoltaic Mode Operation
  - Good Solar Blindness



- Applications**
- Pure UV-C Monitoring
  - Sterilization Lamp Monitoring

### Outline Diagrams and Dimensions



### Absolute Maximum Ratings

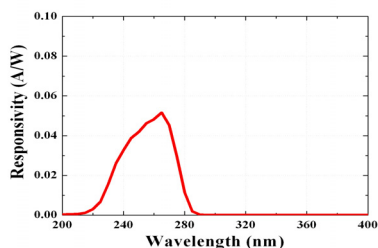
Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	$T_{st}$	-40	90	°C	
Operating Temperature	$T_{op}$	-30	85	°C	
Reverse Voltage	$V_{r, max.}$		2	V	
Forward Current	$I_{f, max.}$		1	mA	
Optical Source Power Range	$P_{opt}$	0.01	100,000	$\mu W/cm^2$	UVC Lamp
Soldering Temperature	$T_{sol}$		260	°C	within 10 sec.

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

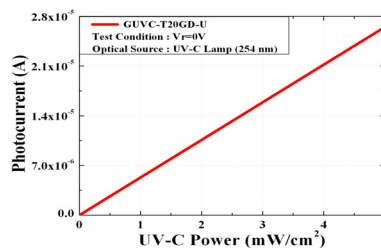
### Characteristics (at 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	$I_d$			90	nA	$V_r = 0.1 V$
Photo Current	$I_{ph}$		5.3		$\mu A$	UVC Lamp, 1mW/cm <sup>2</sup>
Temperature Coefficient	$I_{tc}$		-0.07		%/°C	UVC Lamp
Responsivity	R		0.06		A/W	$\lambda = 254 nm, V_r = 0 V$
Spectral Detection Range	$\lambda$	210		280	nm	10% of R
Active area			6.894		mm <sup>2</sup>	

### Responsivity Curve



### Photocurrent 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.