

# UV-C Sensor

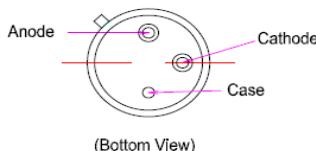
## GUVC-T20GD-U

**Features**

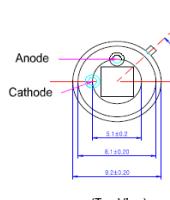
Aluminium Gallium Nitride Based Material  
 Schottky-type Photodiode  
 Photovoltaic Mode Operation  
 Good Solar Blindness

**Applications**

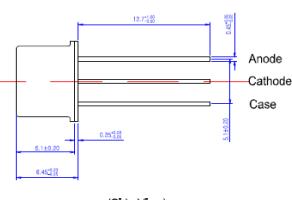
Pure UV-C Monitoring  
 Sterilization Lamp Monitoring

**Outline Diagrams and Dimensions**

(Bottom View)



(Top View)



(Side View)

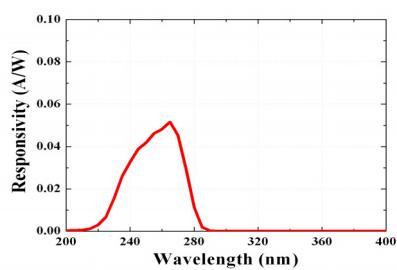
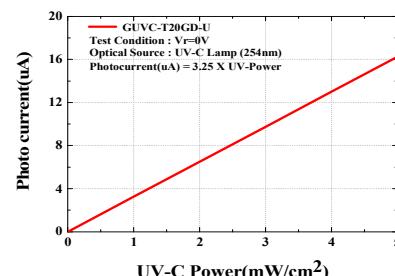
**Absolute Maximum Ratings**

Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	T <sub>st</sub>	-40	90	°C	
Operating Temperature	T <sub>op</sub>	-30	85	°C	
Reverse Voltage	V <sub>r, max.</sub>		2	V	
Forward Current	I <sub>f,max.</sub>		1	mA	
Optical Source Power Range	P <sub>opt</sub>	0.001μ	100m	W/cm <sup>2</sup>	UVC Lamp
Soldering Temperature	T <sub>sol</sub>		260	°C	within 10 sec.

※Notice: apply to us in the case that Optical Source Power is over 100mW/cm<sup>2</sup>.

**Characteristics (at 25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	I <sub>d</sub>			90	nA	V <sub>r</sub> = 0.1 V
Photo Current	I <sub>ph</sub>	2.95	3.25	3.55	μA	UVC Lamp, 1mW/cm <sup>2</sup>
Temperature Coefficient	I <sub>tc</sub>		-0.07		%/°C	UVC Lamp
Responsivity	R		0.06		A/W	λ = 254 nm, V <sub>r</sub> = 0 V
Spectral Detection Range	λ	220		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.