

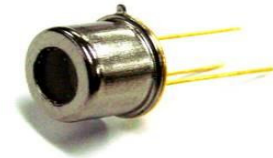
UV-C Sensor

GUVC-T20GD-U



Features

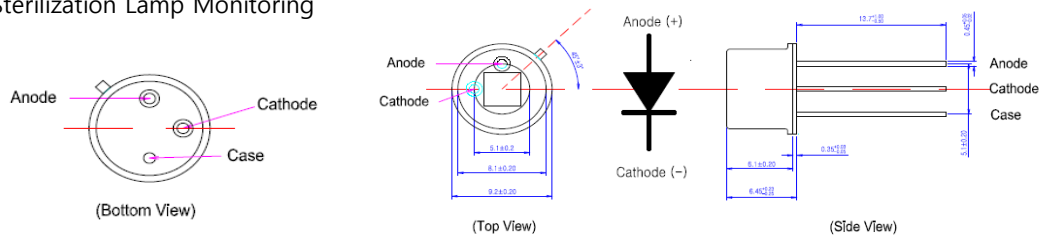
- Aluminium Gallium Nitride Based Material
- Schottky-type Photodiode
- Photovoltaic Mode Operation
- Good Solar Blindness



Applications

- Pure UV-C Monitoring
- Sterilization Lamp Monitoring

Outline Diagrams and Dimensions



Absolute Maximum Ratings

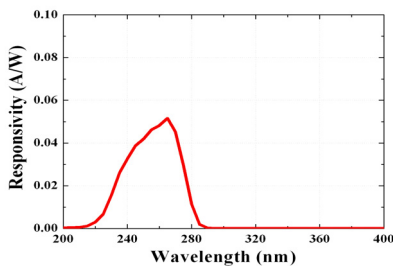
Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	T_{st}	-40	90	$^{\circ}C$	
Operating Temperature	T_{op}	-30	85	$^{\circ}C$	
Reverse Voltage	$V_{r, max.}$		2	V	
Forward Current	$I_{f, max.}$		1	mA	
Optical Source Power Range	P_{opt}	0.001 μ	100m	W/cm ²	UVC Lamp
Soldering Temperature	T_{sol}		260	$^{\circ}C$	within 10 sec.

※Notice: apply to us in the case that Optical Source Power is over 100,000 μ W/cm².

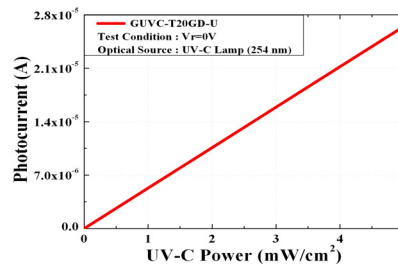
Characteristics (at 25 $^{\circ}C$)

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		μ A	UVC Lamp, 1mW/cm ²
Temperature Coefficient	I_{tc}		-0.07		%/ $^{\circ}C$	UVC Lamp
Responsivity	R		0.06		A/W	$\lambda = 254$ nm, $V_r = 0$ V
Spectral Detection Range	λ	220		280	nm	10% of R
Active area			6.894		mm ²	

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.