

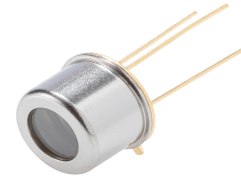
# UV-A Sensor

## GUVA-T21GD-U



### Features

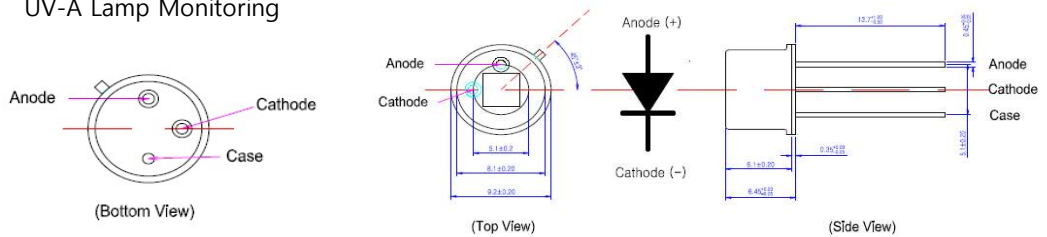
- Gallium Nitride Based Material
- Schottky-type Photodiode
- Photovoltaic Mode Operation
- Good Visible Blindness
- High Responsivity & Low Dark Current



### Applications

- Full UV Band Monitoring
- UV-A Lamp Monitoring

### Outline Diagrams and Dimensions



\* Case : Cathode Connected

### Absolute Maximum Ratings

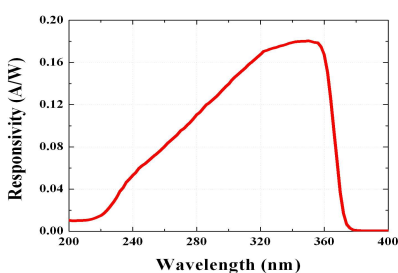
Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	$T_{st}$	-40	90	$^{\circ}C$	
Operating Temperature	$T_{op}$	-30	85	$^{\circ}C$	
Reverse Voltage	$V_{r, max.}$		5	V	
Forward Current	$I_{f, max.}$		1	mA	
Optical Source Power Range	$P_{opt}$	0.01	100	$mW/cm^2$	UVA Lamp
Soldering Temperature	$T_{sol}$		260	$^{\circ}C$	within 10 sec.

※Notice: apply to us in the case that Optical Source Power is over  $100mW/cm^2$

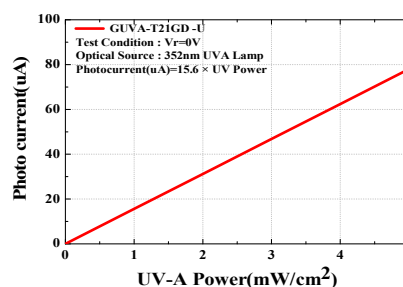
### Characteristics (at 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	$I_d$			90	nA	$V_r = 0.1 V$
Photo Current	$I_{ph}$	14.1	15.6	17.1	$\mu A$	UVA Lamp, $1mW/cm^2$
Temperature Coefficient	$I_{tc}$		0.05		$\%/^{\circ}C$	UVA Lamp
Responsivity	R		0.18		A/W	$\lambda = 350 nm, V_r = 0 V$
Spectral Detection Range	$\lambda$	220		370	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.