

# UV-A Sensor

## GUVV-T10GD

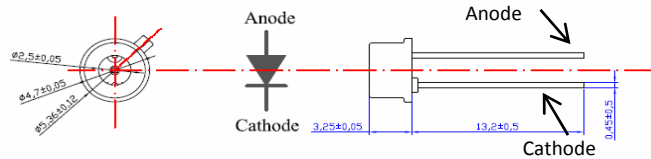


- Features**
- Indium Gallium Nitride Based Material
  - Schottky-type Photodiode
  - Photovoltaic Mode Operation
  - High Responsivity & Low Dark Current



- Applications**
- Full UV Band Monitoring
  - UV-A Lamp Monitoring
  - Sterilization Lamp Monitoring

**Outline Diagrams and Dimensions**



**Absolute Maximum Ratings**

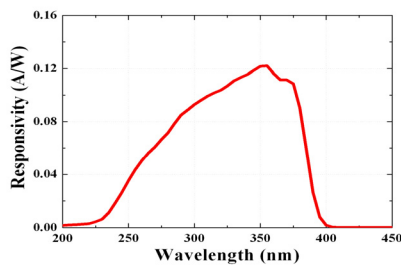
Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	$T_{st}$	-40	90	$^{\circ}C$	
Operating Temperature	$T_{op}$	-30	85	$^{\circ}C$	
Reverse Voltage	$V_{r, max.}$		2	V	
Forward Current	$I_{f, max.}$		1	mA	
Optical Source Power Range	$P_{opt}$	0.1 $\mu$	100m	W/cm <sup>2</sup>	UVA Lamp
Soldering Temperature	$T_{sol}$		260	$^{\circ}C$	within 10 sec.

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

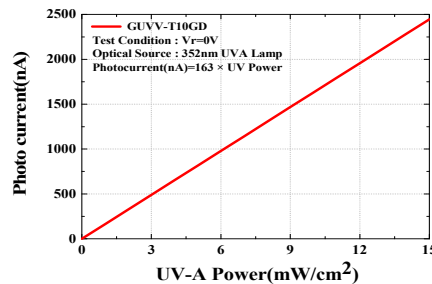
**Characteristics (at 25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	$I_d$			1	nA	$V_r = 0.1 V$
Photo Current	$I_{ph}$	147	163	179	nA	UVA Lamp, 1mW/cm <sup>2</sup>
Temperature Coefficient	$I_{tc}$		0.1		%/ $^{\circ}C$	UVA Lamp
Responsivity	R		0.12		A/W	$\lambda = 350 nm, V_r = 0 V$
Spectral Detection Range	$\lambda$	230		395	nm	10% of R
Active area			0.076		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.