



# Electro Optical Components, Inc.

5464 Skylane Boulevard, Suite D, Santa Rosa, CA 95403

Toll Free: 855-EOC-6300

[www.eoc-inc.com](http://www.eoc-inc.com) | [info@eoc-inc.com](mailto:info@eoc-inc.com)



## UV-A Sensor GUVA-T11GD

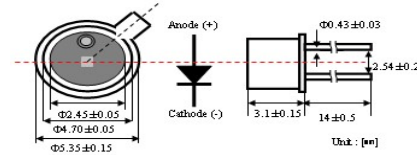


- Features**
- Gallium Nitride Based Material
  - Schottky-type Photodiode
  - Photovoltaic Mode Operation
  - Good Visible Blindness
  - High Responsivity & Low Dark Current



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

### Outline Diagrams and Dimensions



### Absolute Maximum Ratings

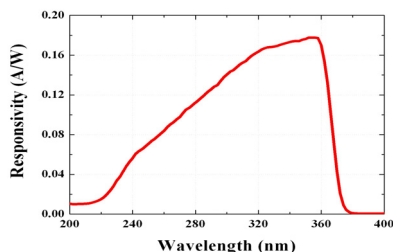
Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	$T_{st}$	-40	90	$^{\circ}C$	
Operating Temperature	$T_{op}$	-30	85	$^{\circ}C$	
Reverse Voltage	$V_{r, max.}$		5	V	
Forward Current	$I_{f, max.}$		1	mA	
Optical Source Power Range	$P_{opt}$	0.1	100,000	$\mu W/cm^2$	UVA Lamp
Soldering Temperature	$T_{sol}$		260	$^{\circ}C$	within 10 sec.

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

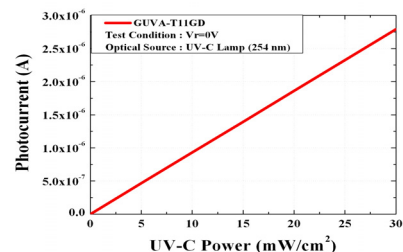
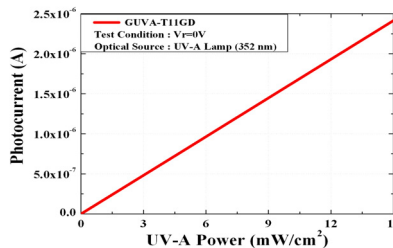
### Characteristics (at 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	$I_d$			1	nA	$V_r = 0.1 V$
Photo Current	$I_{ph}$		161		nA	UVA Lamp, $1 mW/cm^2$
			93		nA	UVC Lamp, $1 mW/cm^2$
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			0.076		$mm^2$	

### 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.