



**ROITHNER LASERTECHNIK GmbH**

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# GUVA-T11GD



## TECHNICAL DATA

### UV-A Sensor

#### 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

#### Absolute Maximum Ratings

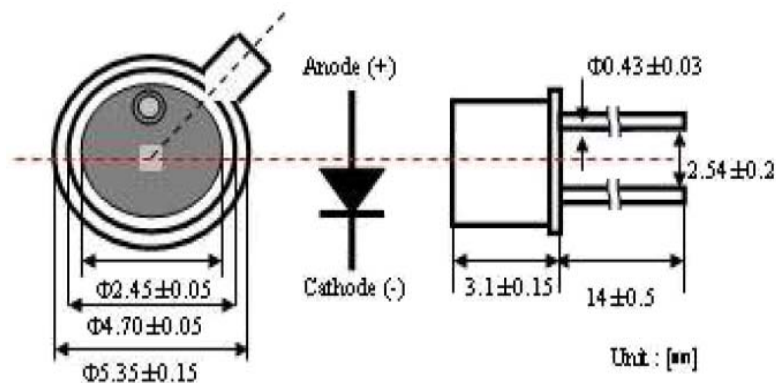
Item	Symbol	Value	Unit
Forward Current	$I_F$	1	mA
Reverse Voltage	$V_R$	5	V
Operating Temperature	$T_{op}$	-30 ... +85	°C
Storage Temperature	$T_{st}$	-40 ... +90	°C
Soldering Temperature *	$T_{sol}$	260	°C

\* must be completed within 10 seconds

#### Characteristics (25°C)

Item	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Dark Current	$I_D$	$V_R = 0.1 V$	-	-	1	nA
Photo Current	$I_{PD}$	UVA Lamp, 1 mW/cm <sup>2</sup>	-	160	-	nA
		UVC Lamp, 1 mW/cm <sup>2</sup>	-	93	-	nA
Temperature Coefficient	$I_{TC}$	UVA Lamp	-	0.05	-	% / °C
Responsivity	R	$\lambda = 350 nm, V_R = 0 V$	-	0.18	-	A/W
Spectral Detection Range	$\lambda$	10% of R	220	-	370	nm

#### Package Dimension



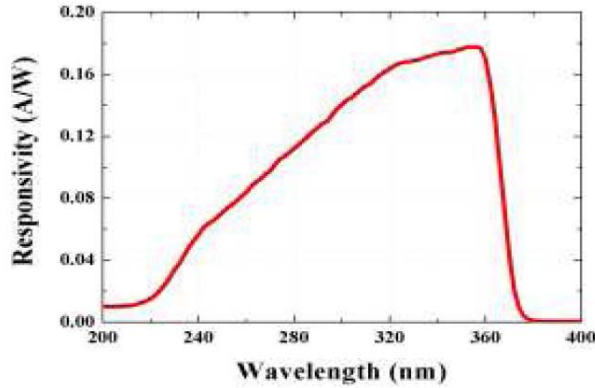


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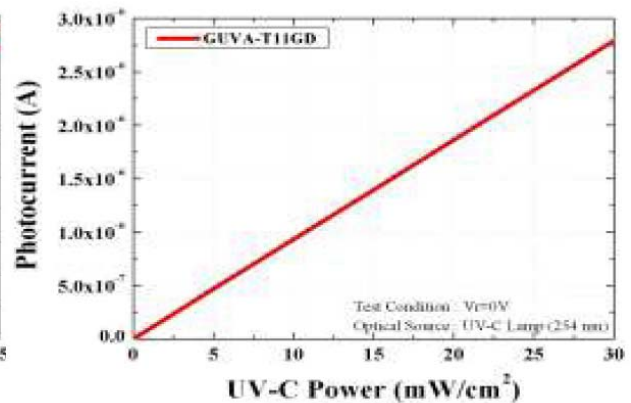
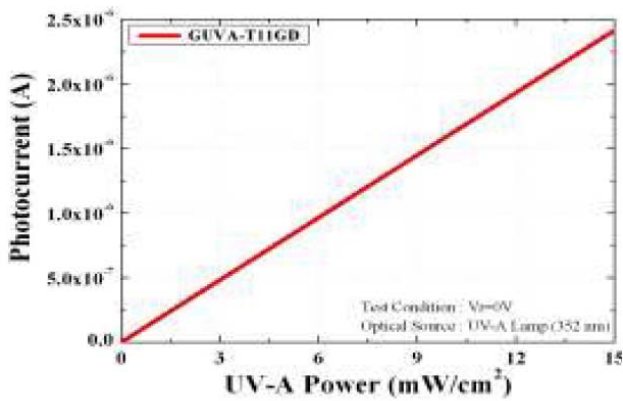
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## Responsivity Curve

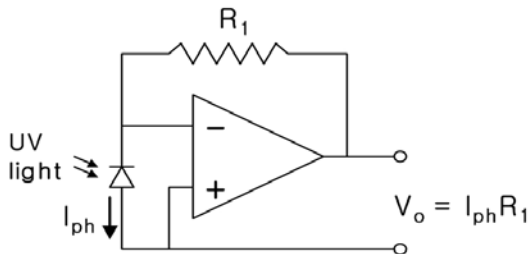


## Photocurrent along UV Power



## Application Circuit Exemple

1. Basic Feedback Ammeter



2. Feedback Ammeter with Selective Voltage Gain

