

# UV / Visible Sensor

## GVBL-T12GD

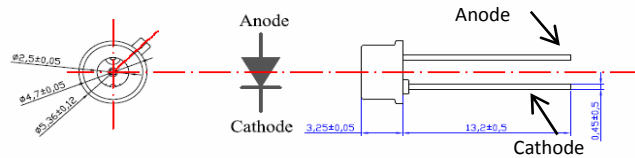


- Features**
- TO-46 with quartz glass
  - Indium Gallium Nitride Based Material
  - PN-type Photodiode
  - Photovoltaic Mode Operation
  - High Responsivity & Low Dark Current



- Applications**
- UV LED Monitoring (365, 385nm, etc.)
  - Blue LED Monitoring
  - UVA Lamp Monitoring
  - UV Curing

### Outline Diagrams and Dimensions



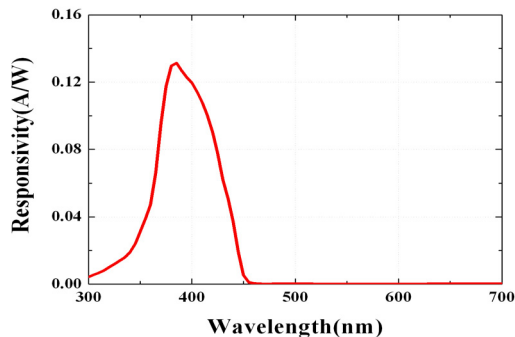
### Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	$T_{st}$	-40	90	°C	
Operating Temperature	$T_{op}$	-30	85	°C	
Reverse Voltage	$V_{r, max.}$		5	V	
Forward Current	$I_{f, max.}$		1	mA	
Soldering Temperature	$T_{sol}$		260	°C	within 10 sec.

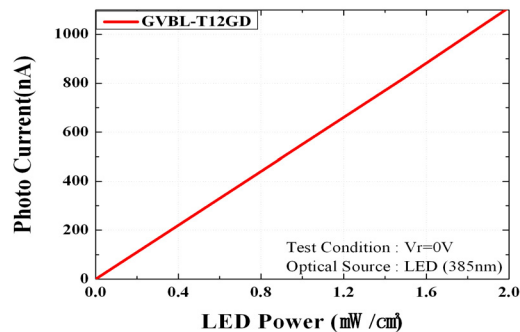
### Characteristics (at 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	$I_d$			1	nA	$V_r = 0.1$ V
Photo Current	$I_{ph}$		550		nA	LED (385nm), $1\text{mW}/\text{cm}^2$
Responsivity	R		0.13		A/W	$\lambda = 385$ nm, $V_r = 0$ V
Spectral Detection Range	$\lambda$	330		445	nm	10% of R

### Responsivity Curve



### Photocurrent along LED 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.