

# UV / Visible Sensor

## GVBL-S12SD



**Features**

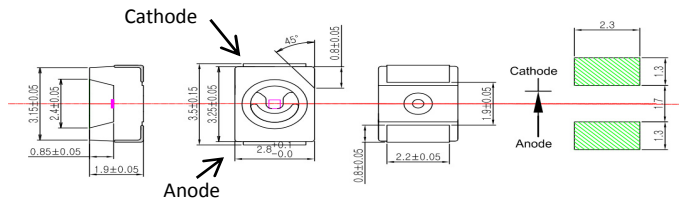
- SMD3528 with Si-encapsulant
- Indium Gallium Nitride Based Material
- PN-type Photodiode
- Photovoltaic Mode Operation
- High Responsivity & Low Dark Current



**Applications**

- UV LED Monitoring (385, 405nm, etc.)
- Blue LED Monitoring
- UVA Lamp Monitoring
- UV Curing

### Outline Diagrams and Dimensions



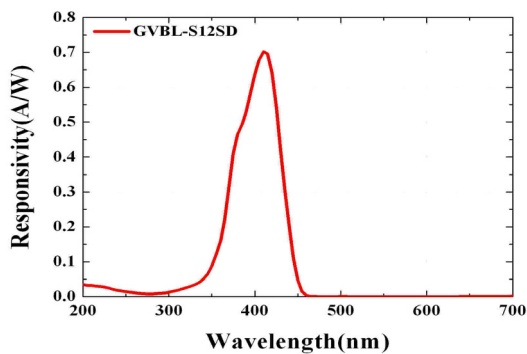
### Absolute Maximum Ratings

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.

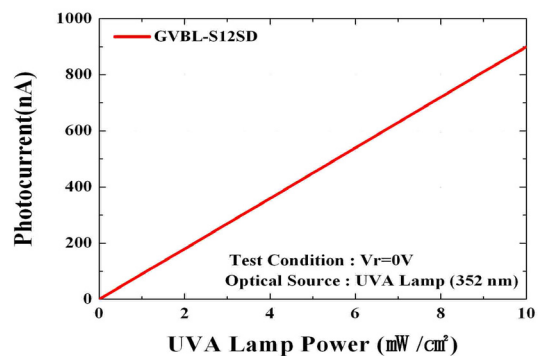
### Characteristics (at 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	$I_d$			1	nA	$V_r = 0.1$ V
Photo Current	$I_{ph}$		90		nA	UVA (352nm), 1mW/cm <sup>2</sup>
			790			405nm LED, 1mW/cm <sup>2</sup>
Responsivity	R		0.68		A/W	$\lambda = 405$ nm, $V_r = 0$ V
Spectral Detection Range	$\lambda$	345		450	nm	10% of R

### Responsivity Curve



### Photocurrent along UV Power



### Caution

ESD can damage the device hence please avoid ESD.