



## GVBL-S12SD

- PN-type Photodiode
- Indium Gallium Nitride Based Material
- 345 – 450 nm
- Photovoltaic Operation Mode
- SMD 3528, 3.15 x 2.80 x 1.90 mm



### Description

**GVBL-S12SD** is a Photodiode working in the spectral range of 345 – 450 nm. It contains an Indium Gallium Nitride based chip die, housed into SMD 3528 package, is a great solution, as example for blue LED monitoring, UV curing or UV LED monitoring.

### Absolute Maximum Ratings

Parameter	Symbol	Values	Unit
Reverse Voltage	$V_R$	5	V
Forward Current	$I_{OP}$	1	mA
Operating Temperature	$T_{CASE}$	-30 – +85	°C
Storage Temperature	$T_{STG}$	-40 – +90	°C
Soldering Temperature *	$T_{SLD}$	260	°C

\* must be completed within 10 seconds

### Electro-Optical Characteristics

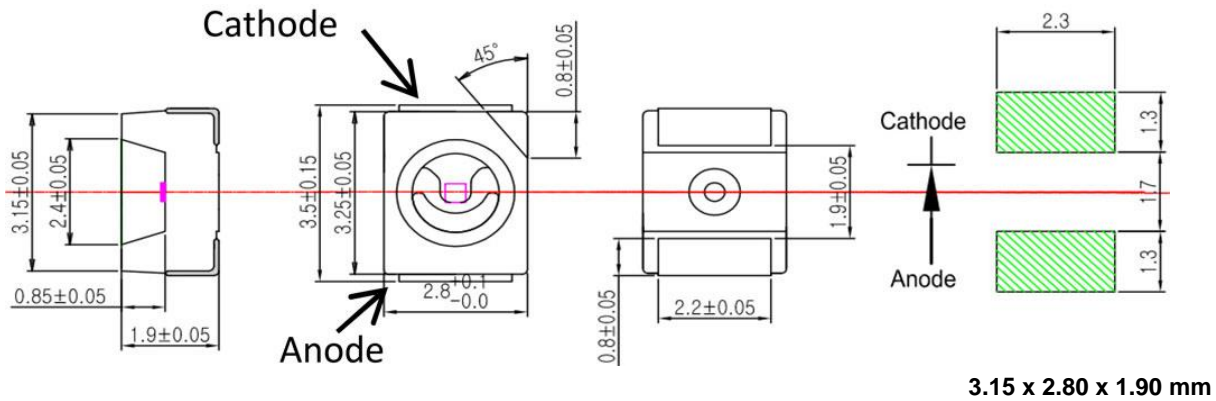
$T_{CASE} = 25^{\circ}C$

Parameter	Symbol	Values	Unit
Dark Current ( $V_R=0.1V$ )	$I_D$	max. 1	nA
Photo Current	$I_{PH}$	(UVA 352nm, 1mW/cm <sup>2</sup> )	typ. 44
		(LED 405nm, 1mW/cm <sup>2</sup> )	790
Responsivity (405nm, $V_R=0.1V$ )	$R$	typ. 0.68	A/W
Spectral Detection Range	$\lambda$	345 – 450	nm
Active Area	$A$	0.06	mm <sup>2</sup>



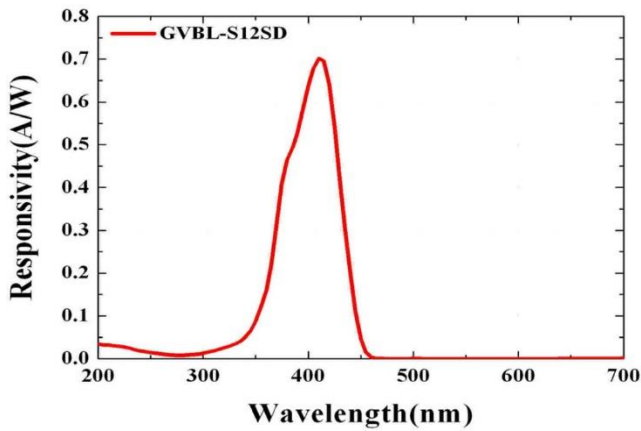
## Outline Dimensions

### GVBL-S12SD

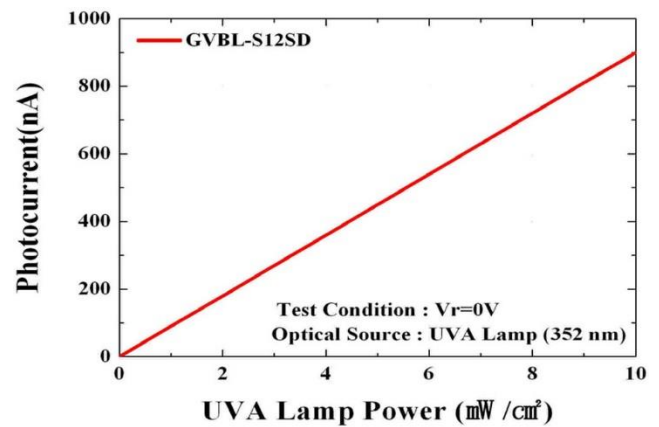


## Typical Performance Curves

### Relative Responsivity



### Output Voltage vs. UV Power



## Caution

ESD can damage the device hence please avoid ESD.