



## GUVVC-S10GD

- UV Schottky-type Photodiode
- Aluminium Gallium Nitride Based Material
- UVC, 220 – 280 nm
- Photovoltaic Operation Mode
- SMD 3535, 3.5 x 3.5 x 1 mm



### Description

**GUVVC-S10GD** is a UVC Photodiode working in the spectral range of 220 – 280 nm. It contains The Aluminium Gallium Nitride based chip die, housed into SMD 3535 package, is a great solution, as example for pure UVC monitoring or sterilization lamp monitoring.

### Absolute Maximum Ratings

Parameter	Symbol	Values	Unit
Reverse Voltage	$V_R$	3	V
Forward Current	$I_{OP}$	1	mA
Optical Source Power Range	$P_{OPT}$	0.1 $\mu$ – 100 m	W/cm <sup>2</sup>
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

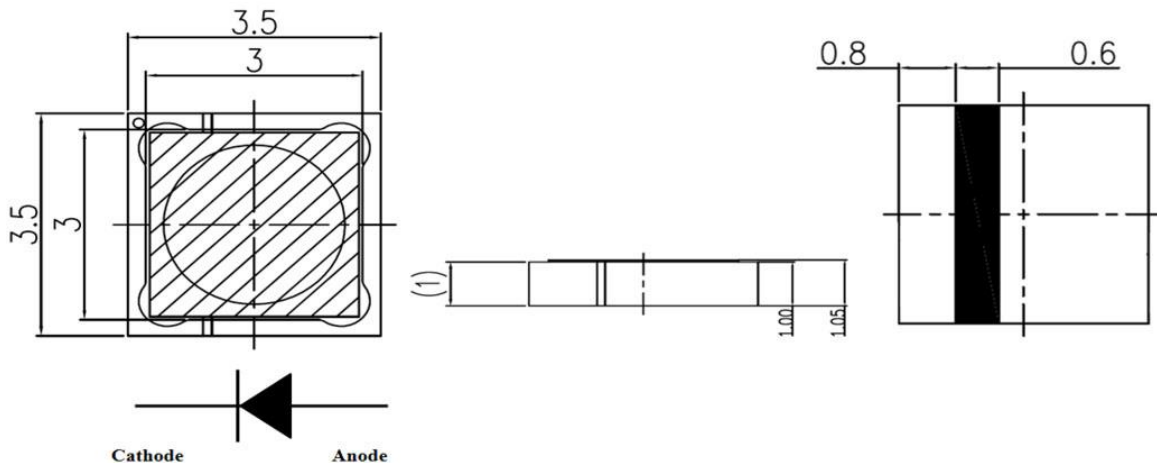
$T_{CASE} = 25^\circ\text{C}$

Parameter	Symbol	Values	Unit
Dark Current ( $V_R=0.1\text{V}$ )	$I_D$	max. 1	nA
Photo Current (UVC Lamp, 1mW/cm <sup>2</sup> )	$I_{PH}$	70 – 85	nA
Temperatur Coefficient	$I_{TC}$	typ. -0.07	%/°C
Responsivity ( $\lambda=254\text{nm}$ , $V_R=0\text{V}$ )	$R$	typ. 0.07	A/W
Spectral Detection Range	$\lambda$	220 – 280	nm
Active Area	$A$	0.076	mm <sup>2</sup>



## Outline Dimensions

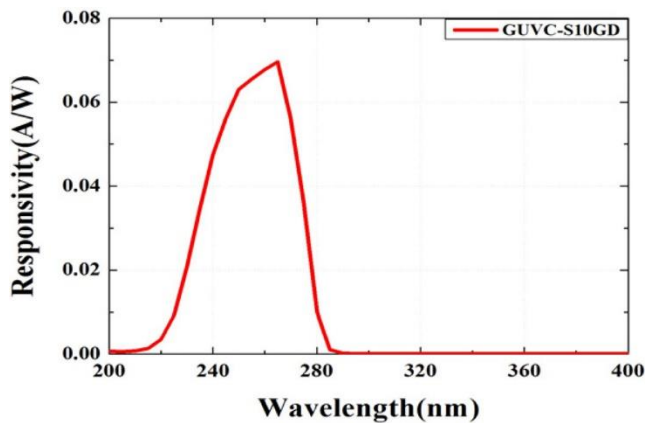
### GUVC-S10GD



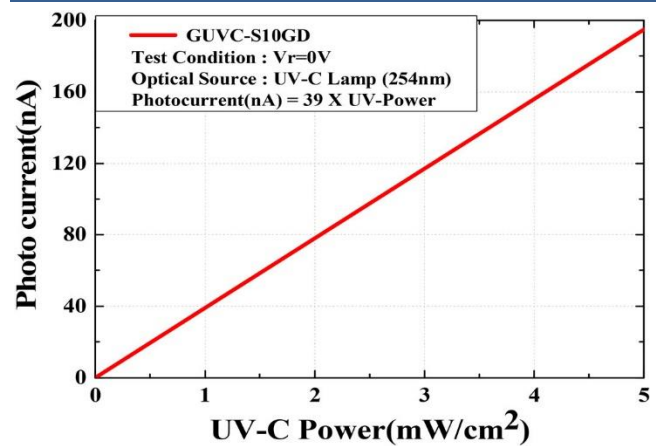
3.5 x 3.5 x 1 mm

## Typical Performance Curves

### Relative Responsivity



### Output Voltage vs. UV Power



## Caution

ESD can damage the device hence please avoid ESD.