



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 μ – 100 m	W/cm ²
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

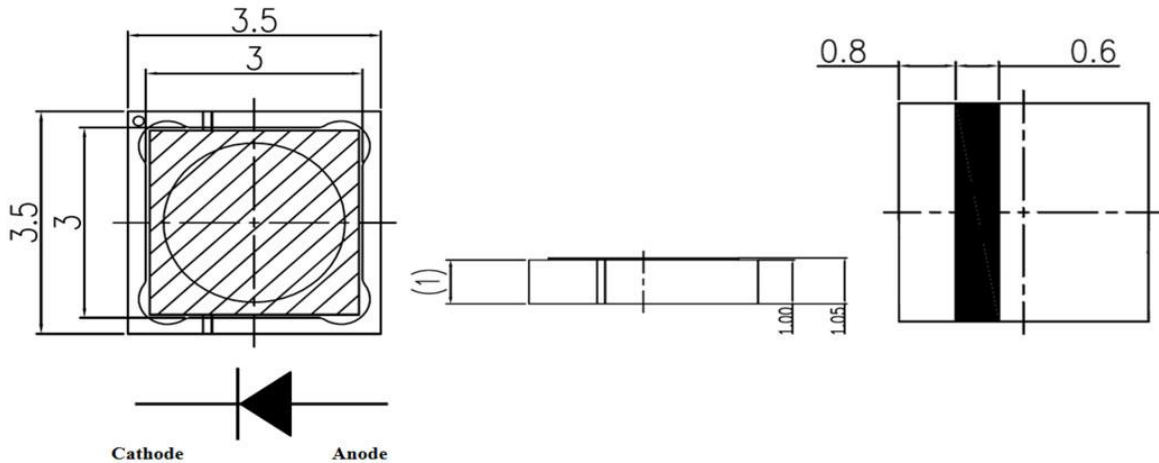
$T_{CASE} = 25^\circ\text{C}$

Parameter	Symbol	Values	Unit
Dark Current ($V_R=0.1\text{V}$)	I_D	max. 1	nA
Photo Current (UVC Lamp, 1mW/cm ²)	I_{PH}	35 – 42	nA
Temperatur Coefficient	I_{TC}	typ. -0.07	%/°C
Responsivity	R	typ. -0.07	A/W
Spectral Detection Range	λ	220 – 280	nm
Active Area	A	0.076	mm ²



Outline Dimensions

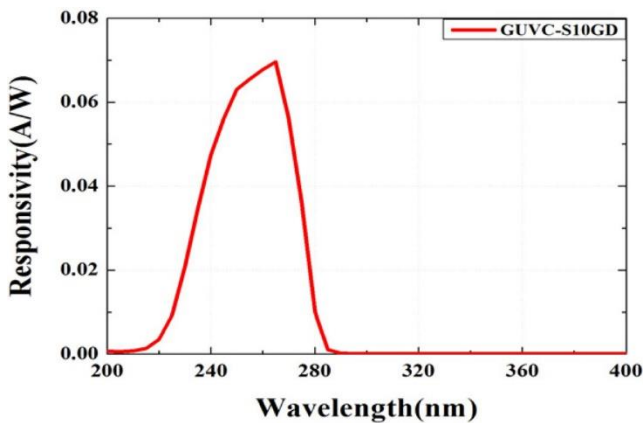
GUVC-S10GD



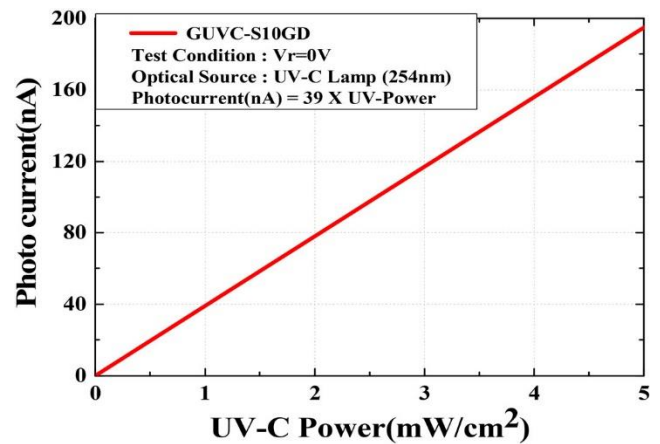
3.5 x 3.5 x 1 mm

Typical Performance Curves

Relative Responsivity



Output Voltage vs. UV Power



Caution

ESD can damage the device hence please avoid ESD.