

UV / Visible Sensor

GVGR-S11SD

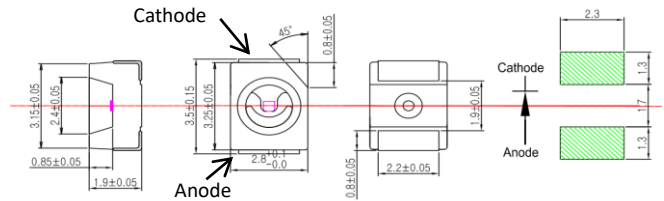


- Features**
- SMD3528 with Si-encapsulant
 - Indium Gallium Nitride Based Material
 - PN-type Photodiode
 - Photovoltaic Mode Operation
 - High Responsivity & Low Dark Current



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

Outline Diagrams and Dimensions



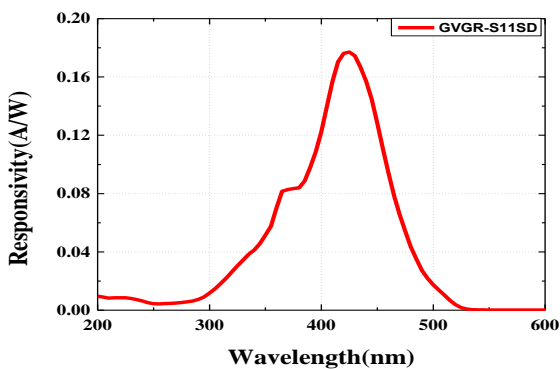
Absolute Maximum Ratings

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.

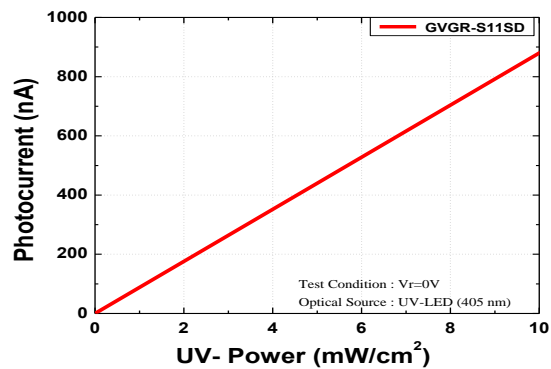
Characteristics (at 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	I_d			1	nA	$V_r = 0.1$ V
Photo Current	I_{ph}		88		nA	LED (405nm), 1 mW/cm^2
Responsivity	R		0.14		A/W	$\lambda = 405 \text{ nm}$, $V_r = 0$ V
Spectral Detection Range	λ	300		500	nm	10% of R

Responsivity Curve



Photocurrent along LED Power



Caution

ESD can damage the device hence please avoid ESD.

No.	REV.	History	날짜
1	1.0	PKG Black color , GVGR-S11SD	2014.01.14
2	1.1	Change of PKG Color (Black => White) "Chip characteristics change (Photocurrent improvement) =>1mW/cm ² @405nm UV LED : 44nA=>88nA	2022.03.22