



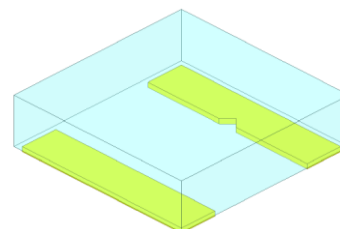
<Preliminary version>

## UV-C Sensor GUVC-S40GD



### Features

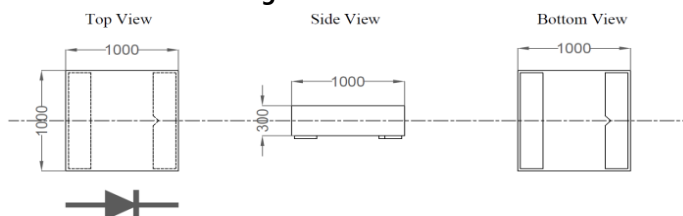
Aluminium Gallium Nitride Based Material  
Schottky-type Photodiode  
Photovoltaic Mode Operation  
Good Solar Blindness



### Applications

Pure UV-C Monitoring  
Sterilization Lamp Monitoring

### Outline Diagrams and Dimensions



### Absolute Maximum Ratings

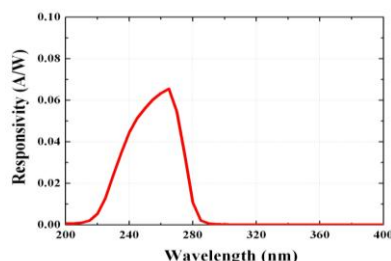
Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	$T_{st}$	-40	90	°C	
Operating Temperature	$T_{op}$	-30	85	°C	
Reverse Voltage	$V_{r, max.}$		3	V	
Forward Current	$I_{f, max.}$		1	mA	
Optical Source Power Range	$P_{opt}$	0.1 $\mu$	100m	W/cm <sup>2</sup>	UVC Lamp
Soldering Temperature	$T_{sol}$		260	°C	within 10 sec.

※Notice: apply to us in the case that Optical Source Power is over 100,000 $\mu$ W/cm<sup>2</sup>.

### 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	$I_{ph}$		150		nA	UVC Lamp, 1mW/cm <sup>2</sup>
Temperature Coefficient	$I_{tc}$		-0.07		%/°C	UVC Lamp
Responsivity	R		0.06		A/W	$\lambda = 254$ nm, $V_r = 0$ V
Spectral Detection Range	$\lambda$	220		280	nm	10% of R
Active area			0.827		mm <sup>2</sup>	

### Responsivity Curve



[CSP Subminiature Package vs TO-46 & SMD3535](#)

Caution: ESD can damage the device hence please avoid ESD.