



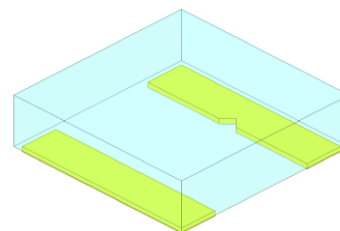
<Preliminary version>

UV-C Sensor GUVC-S40GD



Features

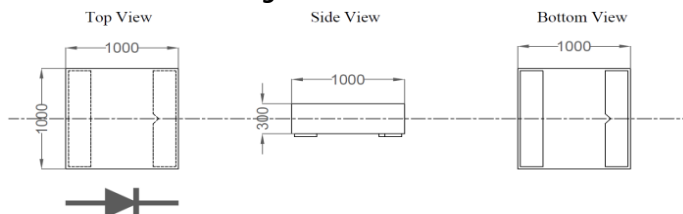
- Aluminium Gallium Nitride Based Material
- Schottky-type Photodiode
- Photovoltaic Mode Operation
- Good Solar Blindness



Applications

- Pure UV-C Monitoring
- Sterilization Lamp Monitoring

Outline Diagrams and Dimensions



Absolute Maximum Ratings

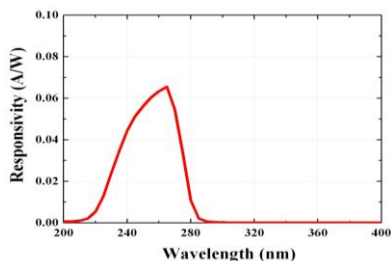
Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	T_{st}	-40	90	°C	
Operating Temperature	T_{op}	-30	85	°C	
Reverse Voltage	$V_{r, max.}$		3	V	
Forward Current	$I_{f, max.}$		1	mA	
Optical Source Power Range	P_{opt}	0.1 μ	100m	W/cm ²	UVC Lamp
Soldering Temperature	T_{sol}		260	°C	within 10 sec.

※Notice: apply to us in the case that Optical Source Power is over 100,000 μ W/cm².

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 ²
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	λ	220		280	nm	10% of R
Active area			0.827		mm ²	

Responsivity Curve



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

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