

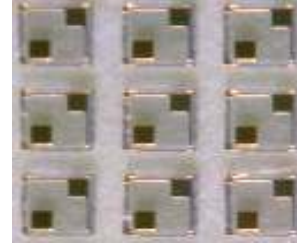
# UV-C Sensor

## GUVC-CS0PD



**Features**

- Aluminium Gallium Nitride Based Material
- Schottky-type Photodiode
- Photovoltaic Mode Operation
- Good Solar Blindness
- High Responsivity & Low Dark Current



**Applications**

- Pure UV-C Monitoring
- Sterilization Lamp Monitoring

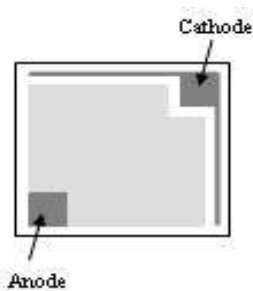
### Absolute Maximum Ratings

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	
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	$I_{ph}$		34		nA	UVC Lamp, $1 \text{ mW/cm}^2$
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	$\lambda$	210		280	nm	10% of R

### Physical Characteristics and Dimensions



Material : AlGaIn / Sapphire  
 Chip Size :  $0.4 \times 0.4 \text{ mm}^2$   
 Active Area :  $0.076 \text{ mm}^2$   
 Pad Size :  $0.12 \times 0.12 \text{ mm}^2$   
 Thickness : 0.1 mm

### Responsivity Curve

