

# UV-A Sensor

## GUVV-S10SD



### Features

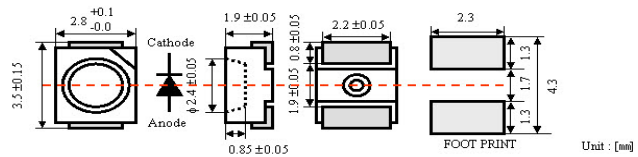
Indium Gallium Nitride Based Material  
Schottky-type Photodiode  
Photovoltaic Mode Operation  
High Responsivity & Low Dark Current



### Applications

UV-A Lamp Monitoring

### Outline Diagrams and Dimensions



### Absolute Maximum Ratings

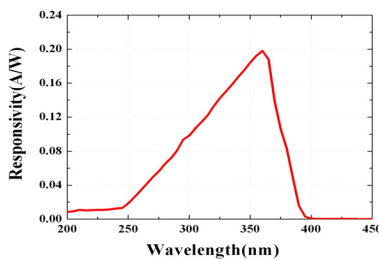
Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	$T_{st}$	-40	90	°C	
Operating Temperature	$T_{op}$	-30	85	°C	
Reverse Voltage	$V_{r, max.}$		2	V	
Forward Current	$I_{f, max.}$		1	mA	
Optical Source Power Range	$P_{opt}$	0.1	100,000	$\mu W/cm^2$	UVA Lamp
Soldering Temperature	$T_{sol}$		260	°C	within 10 sec.

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

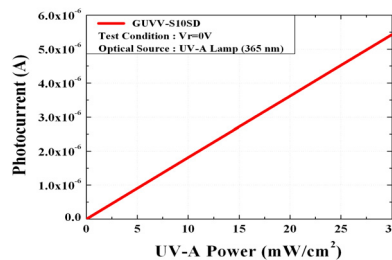
### Characteristics (at 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	$I_d$			1	nA	$V_r = 0.1 V$
Photo Current	$I_{ph}$		181		nA	UVA Lamp, $1 mW/cm^2$
Temperature Coefficient	$I_{tc}$		0.1		%/°C	UVA Lamp
Responsivity	R		0.18		A/W	$\lambda = 360 nm, V_r = 0 V$
Spectral Detection Range	$\lambda$	240		395	nm	10% of R
Active area			0.076		mm <sup>2</sup>	

### Responsivity Curve



### Photocurrent along UV Power



### Caution

ESD can damage the device hence please avoid ESD.