

# UV-A Sensor

## GUVA-S22ED



### Features

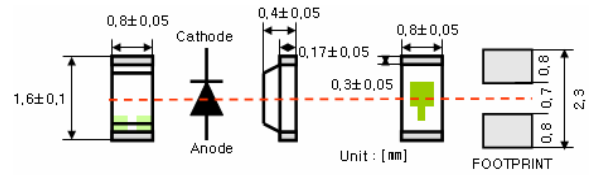
- Gallium Nitride Based Material
- Schottky-type Photodiode
- Photovoltaic Mode Operation
- Good Visible Blindness
- High Responsivity & Low Dark Current



### Applications

UV Index Monitoring

### Outline Diagrams and Dimensions



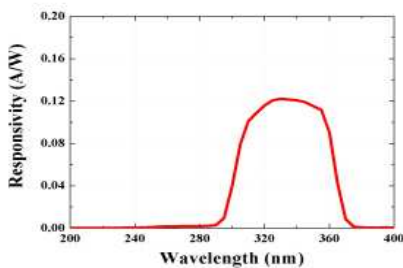
### Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	$T_{st}$	-40	90	$^{\circ}C$	
Operating Temperature	$T_{op}$	-30	85	$^{\circ}C$	
Reverse Voltage	$V_{r, max.}$		5	V	
Forward Current	$I_{f, max.}$		1	mA	
Soldering Temperature	$T_{sol}$		260	$^{\circ}C$	within 5 sec.

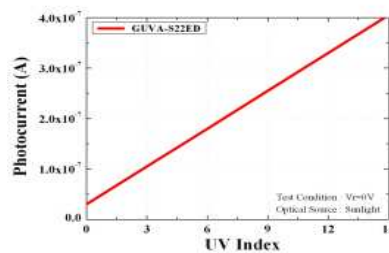
### Characteristics (at 25 $^{\circ}C$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	$I_d$			1	nA	$V_r = 0.1 V$
Photo Current	$I_{ph}$		121		nA	UVA Lamp, 1mW/cm <sup>2</sup>
			25		nA	1 UVI
Temperature Coefficient	$I_{tc}$		0.08		%/ $^{\circ}C$	UVA Lamp
Responsivity	R		0.12		A/W	$\lambda = 350 nm, V_r = 0 V$
Spectral Detection Range	$\lambda$	290		370	nm	10% of R

### Responsivity Curve



### Photocurrent along UV Power



### Caution

ESD can damage the device hence please avoid ESD.