

UV-A Sensor

GUVA-S12SD



Features

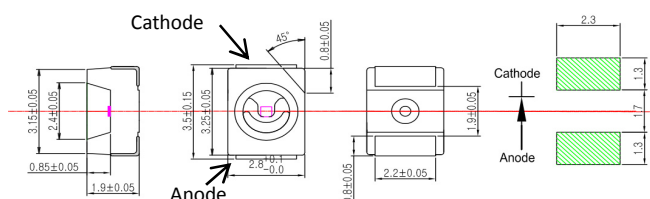
- Gallium Nitride Based Material
- Schottky-type Photodiode
- Photovoltaic Mode Operation
- Good Visible Blindness
- High Responsivity & Low Dark Current



Applications

- UV Index Monitoring
- UV-A Lamp Monitoring

Outline Diagrams and Dimensions



Absolute Maximum Ratings

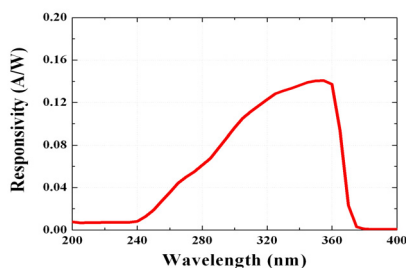
Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	T _{st}	-40	90	°C	
Operating Temperature	T _{op}	-30	85	°C	
Reverse Voltage	V _{r, max.}		5	V	
Forward Current	I _{f, max.}		1	mA	
Optical Source Power Range	P _{opt}	0.1μ	100m	W/cm ²	UVA Lamp
Soldering Temperature	T _{sol}		260	°C	within 10 sec.

※Notice: apply to us in the case that Optical Source Power is over 100mW/cm²

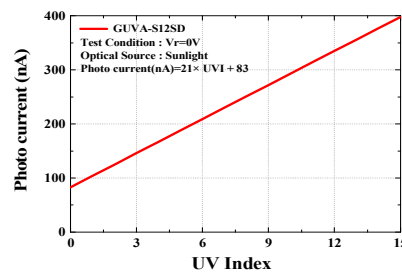
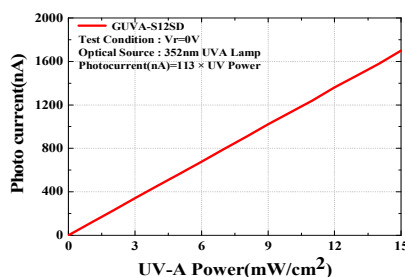
Characteristics (at 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	I _d			1	nA	V _r = 0.1 V
Photo Current	I _{ph}	101	113	125	nA	UVA Lamp, 1mW/cm ²
			21		nA	1 UVI
Temperature Coefficient	I _{tc}		0.08		%/°C	UVA Lamp
Responsivity	R		0.14		A/W	λ = 350 nm, V _r = 0 V
Spectral Detection Range	λ	240		370	nm	10% of R
Active area			0.076		mm ²	

Responsivity Curve



Photocurrent along UV Power



Caution

ESD can damage the device hence please avoid ESD.