

UV-A Sensor

GUVA-T31GD



Features

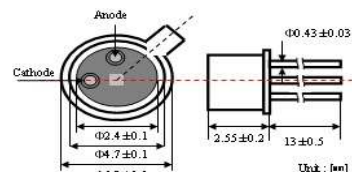
Gallium Nitride Based Material
Schottky-type Photodiode
Photovoltaic Mode Operation
Good Visible Blindness
High Responsivity & Low Dark Current



Applications

Full UV Band Monitoring
UV-A Lamp Monitoring
Sterilization Lamp Monitoring

Outline Diagrams and Dimensions



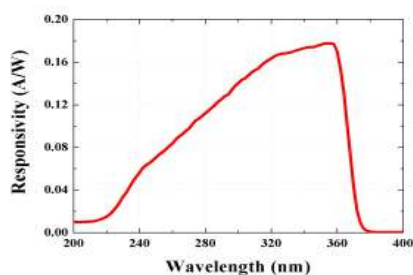
Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	T_{st}	-40	90	°C	
Operating Temperature	T_{op}	-30	85	°C	
Reverse Voltage	$V_{r, max.}$		5	V	
Forward Current	$I_{f, max.}$		1	mA	
Soldering Temperature	T_{sol}		260	°C	within 10 sec.

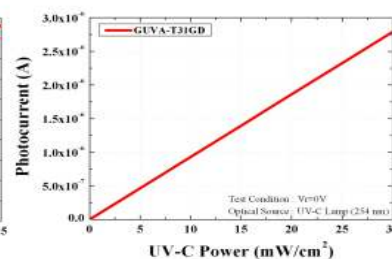
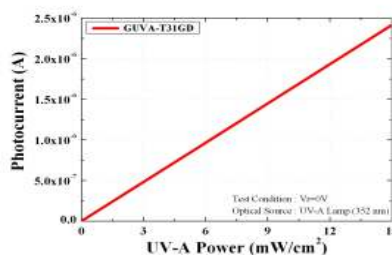
Characteristics (at 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	I_d			10	pA	$V_r = 0.1$ V
Photo Current	I_{ph}		160		nA	UVA Lamp, 1 mW/cm^2
			93		nA	1 UVI
Temperature Coefficient	I_{tc}		0.05		%/°C	UVA Lamp
Responsivity	R		0.18		A/W	$\lambda = 350 \text{ nm}$, $V_r = 0$ V
Spectral Detection Range	λ	220		370	nm	10% of R

Responsivity Curve



Photocurrent along UV Power



Caution