



GUVB-T21GH

- UV-Photodiode with integrated TI Amplifier
- Voltage Output
- Single Supply Voltage
- Structure: AlGaN



Description

GUVB-T21GH is an **AlGaN based** UV photodiode with integrated transfer impedance amplifier, working in photovoltaic mode operation. It offers high sensitivity, good solar blindness, and comes in compact TO-5 housing. It is designed for reliably monitoring UV-B radiation and providing easy to process voltage output. **GUVB-T21GH** can be operated from a single supply voltage.

Maximum Ratings

Parameter	Symbol	Values		Unit
		Min.	Max.	
Supply Voltage	V_{CC}		5.5	VDC
Operating Temperature	T_{CASE}	- 30	+ 85	°C
Storage Temperature	T_{STG}	- 40	+ 90	°C
Soldering Temperature	T_{SOLDER}		260	°C

Characteristics ($T_{CASE} = 25^{\circ}C$)

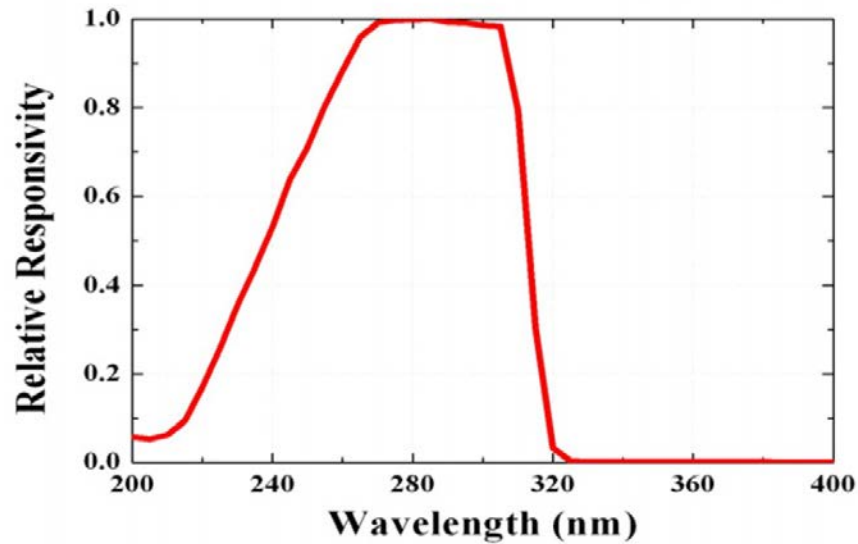
Parameter	Symbol	Values			Unit
		Min.	Typ.	Max.	
Spectral Detection Range (10% of R_p)	λ	220		320	nm
Supply Voltage	V_{CC}	1.8		5.5	VDC
Supply Current	I_Q		50		μA
Responsivity (@254nm)	R_p		1.3		mV/nW
Output Voltage (1 mW/cm ²)	V_{out}		0.72		V
Offset Voltage	V_{off}		8		mV
Detection Power Range ($V_{CC}=5V$)	P	0		6.9	mW/cm ²
Rise Time	T_f		3		ms



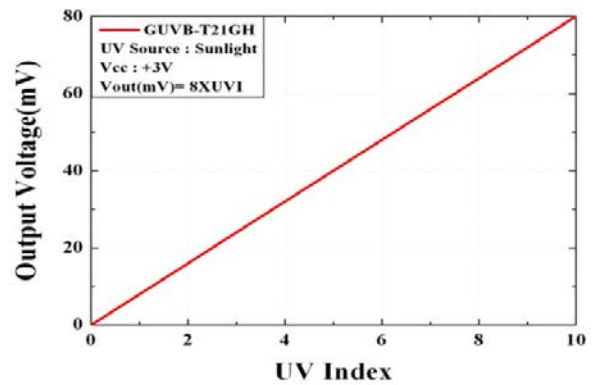
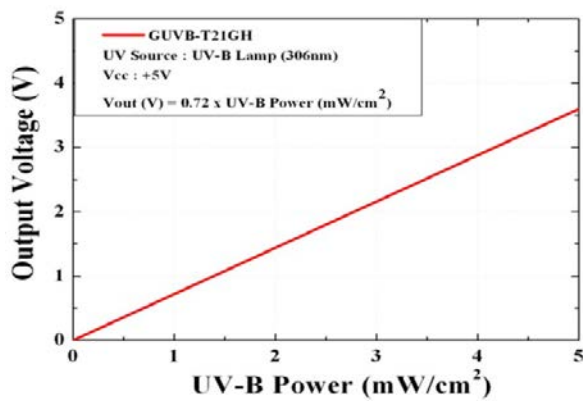


Performance Characteristics

Relative Responsivity

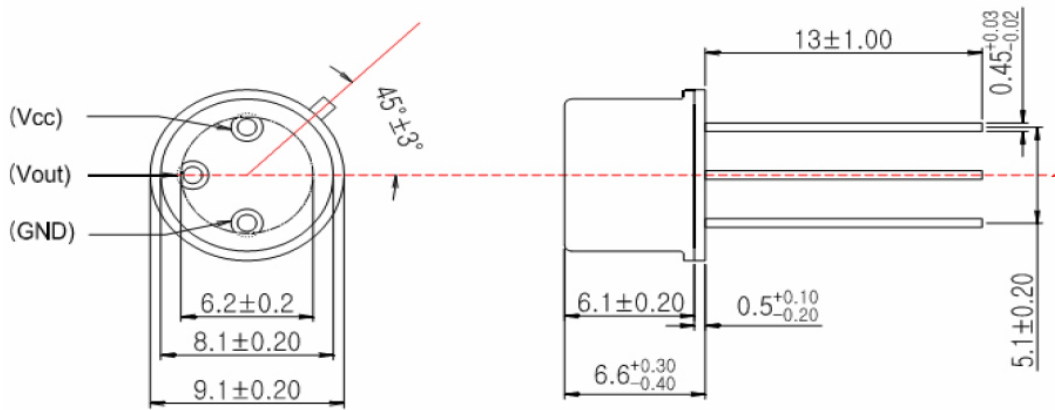


Output Voltage vs. Intensity





Drawing



Dimensions in mm

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The above specifications are for reference purpose only and subjected to change without prior notice