

UV-TIAMO

- SiC UV Photodiode
- Integrated Transimpedance Amplifier
- Sensitivity Range: 210-380 nm
- Max. Irradiance: 18 $\mu\text{W}/\text{cm}^2$
- TO-5 Can, Flat Window Cap



Description

UV-TIAMO devices are using modern hybrid technology to cancel unwanted signal disturbances caused by moisture or electromagnetic radiation. The stable 0-5 V output voltage can be directly connected to a SPC controller or a voltage multimeter. No external amplifier is needed

Maximum Ratings

Parameter	Symbol	Values		Unit
		Min.	Max.	
Operating Temperature	T_{CASE}	- 25	+ 85	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	- 40	+ 100	$^{\circ}\text{C}$
Lead Solder Temperature *	T_{SLD}		+ 300	$^{\circ}\text{C}$

* must be completed within 5 seconds

General Characteristics ($T_{CASE}=25^{\circ}\text{C}$, $V_{SUPPLY}=+5\text{V}$)

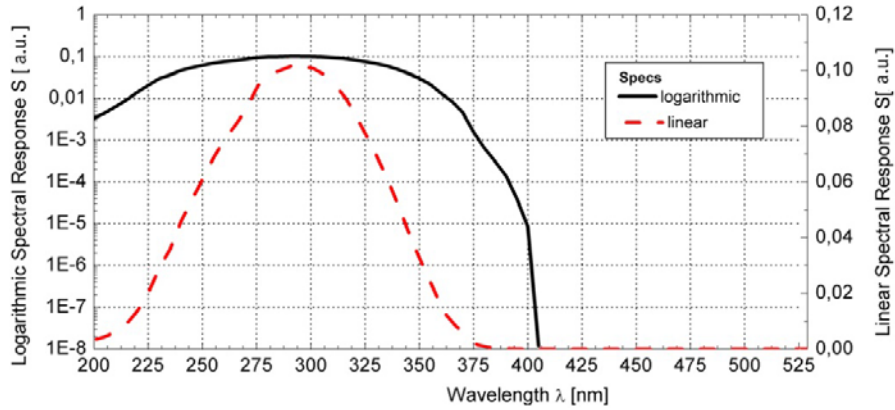
Parameter	Symbol	Min.	Values	Max.	Unit
			Typ.		
Supply Voltage	V_{SUPPLY}	2.5		5.0	V
Saturation Voltage	V_{SAT}		V_{SUPPLY}		V
Dark Offset Voltage	V_{OFFSET}		50		μV
Temperature Coefficient	T_C			+0.3	%/K
Current Consumption	I		0.8		mA
Bandwidth (-3 dB)	Θ		15		Hz
Rise Time (63%)	t_r		10		ms

Spectral Characteristics ($T_{CASE}=25^{\circ}\text{C}$, $V_{SUPPLY}=+5\text{V}$)

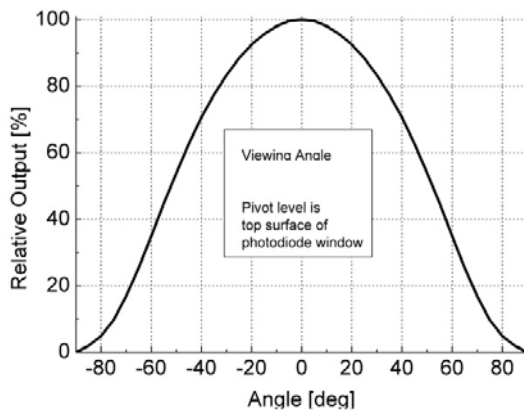
Parameter	Symbol	Min.	Values	Max.	Unit
			Typ.		
Broadband Sensitivity	S	0.0018		18	$\mu\text{W}/\text{cm}^2$
Sensitivity at Peak	S_{max}		280		$\text{mV}/\mu\text{W}/\text{cm}^2$
Wavelength of max. Spectral Sensitivity	λ_{max}		300		nm
Sensitivity Range ($S=0.1*S_{max}$)		210		380	nm
Visible Blindness ($S_{max}/S_{>405\text{nm}}$)	VB	10^{10}			

Performance Characteristics

Spectral Response



Field of View



Outline Dimensions

TO-5 with flat window

