



Basic UV Sensor Module 2

GUVA-T11GM-2



Description

UV sensors of Genicom make the photocurrent under UV light but the level of photocurrent is very low. This small signal is not easy to be checked by normal current measurement equipments and it is not fit input signal of analog-to-digital converter(ADC). This module allows detecting UV Optical power in wide wavelength range by adjusting 2 switches.

Features Adaptive single supply voltage range to voltage of ADC

Applications UVA Lamp Power Check
UVA Lamp Monitoring

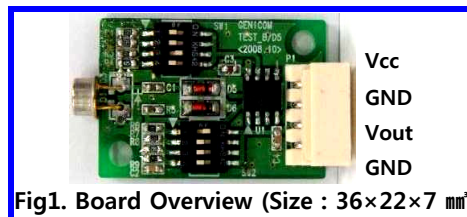


Fig1. Board Overview (Size : 36×22×7 mm³)

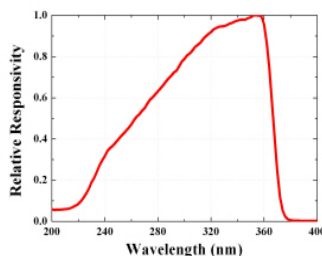
Absolute Maximum Ratings

Parameter	Symbol	Value			Unit	Remark
		Min.	Typ.	Max.		
Storage Temperature	T _{st}	-40		90	°C	
Operating Temperature	T _{op}	-30		85	°C	
Supply Voltage	V _{cc}		5	5.5	V	
Soldering Temperature	T _{sol}			260	°C	Within 10 sec

Electro-Optical Characteristics (at 25 °C)

Parameter	Symbol	Value			Unit	Remark
		Min.	Typ.	Max.		
Supply Voltage	V _{cc}		5		V	DC
Supply Current	I _Q		50		μA	
Spectral Detection Range	λ	220		370	nm	10% of Max.
Output Voltage	V _{out}	0		V _{cc} -0.3	V	
Offset Voltage	V _{off-set}		5		mV	
Response Time	T		3		ms	

Relative Responsivity



Maximum Power Level

The maximum detectable UV optical power can be set by switch 1 on in SW1 row and switch 1 on in SW2 row.

Units : W/cm ²		SW 1			
		1	2	3	4
SW2	1	2.5E+00	2.5E-01	2.5E-02	2.5E-03
	2	1.3E+00	1.3E-01	1.3E-02	1.3E-03
	3	7.5E-01	7.5E-02	7.5E-03	7.5E-04
	4	5.0E-01	5.0E-02	5.0E-03	5.0E-04

* V_{cc}=5V

Caution

ESD can damage the device hence please avoid ESD. Insulate the cap of TO-Can or it can cause malfunction of the device.