

GUVA-S10GD

Features

- Gallium Nitride based material
- Schottky-type photodiode
- No cut-off filters needed
- Intrinsic visible blindness
- High responsivity
- Low dark current
- Designed to operate in photovoltaic mode
- SMD plastic package : 3.5 × 2.8 × 1.8 mm
- Hermetic package sealed with quartz window
- Wide viewing angle : 130degree
- Sensitivity area : 0.076mm²

Applications

- UV exposure measurement for commodity applications
- Sterilization lamp monitoring
- Flame detection

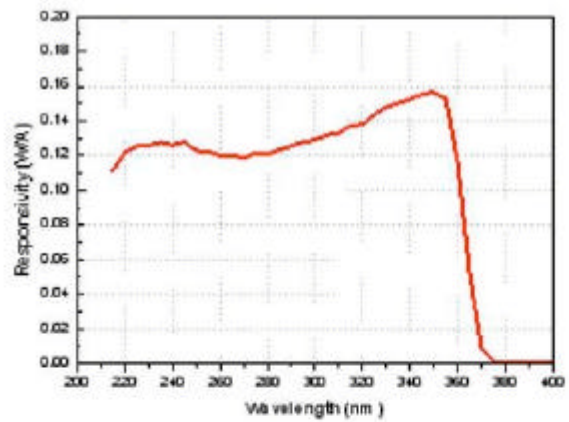
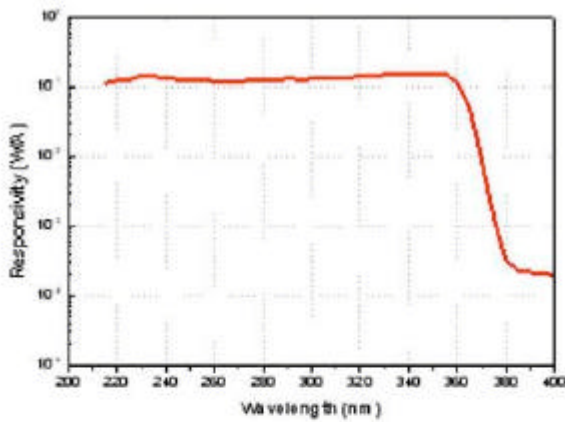
Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit	Test Conditions
Storage Temperature	Tst	-40	90	°C	
Operating Temperature	Top	-30	85	°C	
Reverse Voltage	Vr, max.		5	V	
Forward Current	If,max.		1	mA	
Soldering Temperature	Tsol		260	°C	within 10 sec.

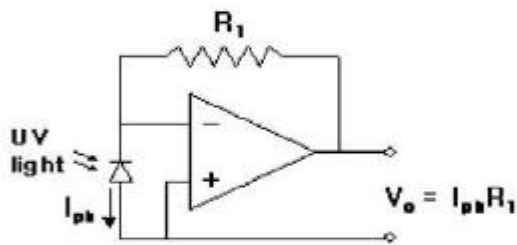
Electro-optical Characteristics (T=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	Id		0.05	1	nA	@ V = -1.0V
Responsivity	R		0.15		A/W	@ λ = 350nm, V=0.0V
Spectral Detection Range	λc	200		370	nm	Monochromator light scan.
Breakdown Voltage	VBR		10			Ir = 1uA
Junction Capacitance	Cj		24		pF	Vr = 0V
Short Circuit Current	Isc		70		nA	UVI=1
Detectivity	D*		1×10 ¹⁴			cmHz ^{1/2} W ⁻¹

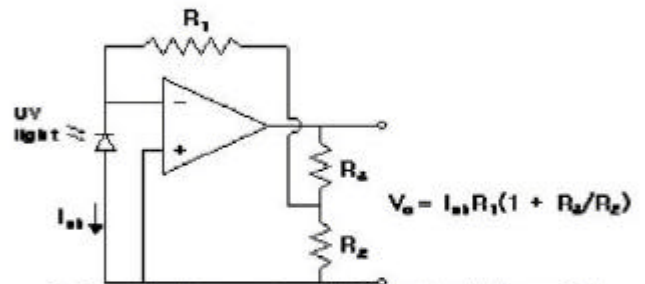
Spectral Response



Application Circuit Example



1, Basic Feedback Ammeter



2, Feedback Ammeter with Selective Voltage Gain

Package Dimension

