PRODUCT

Product List

GUVB-S10GD

Features

Aluminium 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

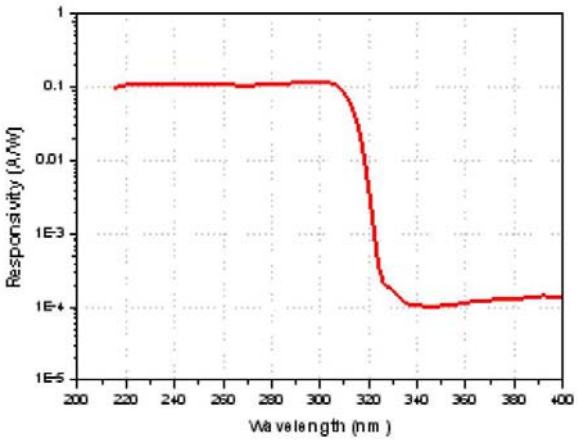
Absolute Maximum Ratings

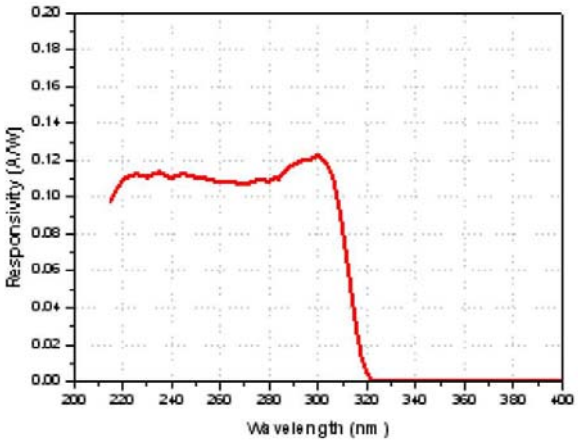
Parameter	Symbol	Min.	Max.	Unit	Test Conditions
Storage Temperature	Tst	-40	90	iÉ	
Operating Temperature	Top	-30	85	iÉ	
Reverse Voltage	Vr, max.		5	V	
Forward Current	If,max.		1	mA	
Soldering Temperature	Tsol		260	iÉ	within 10 sec.

Electro-optical Characteristics (T=25iÉ)

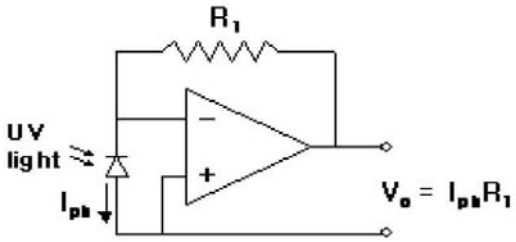
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	Id		0.05	1	nA	@ V = -1.0V
Responsivity	R		0.1		A/W	@ ¥ë=300nm, V=0.0V
Spectral Detection Range	¥ë	200		320	nm	Monochromator light scan.
Breakdown Voltage	VBR		10			Ir=1uA
Junction Capacitance	Cj		24		pF	Vr=0V
Short Circuit Current	Isc		1		nA	UVI=1
Detectivity	D*		1×1014			cmHz1/2W-1

Spectral Response

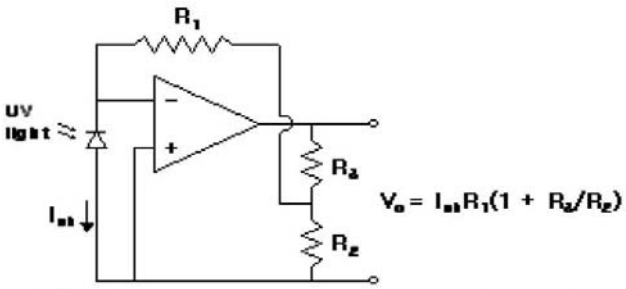




Application Circuit Example

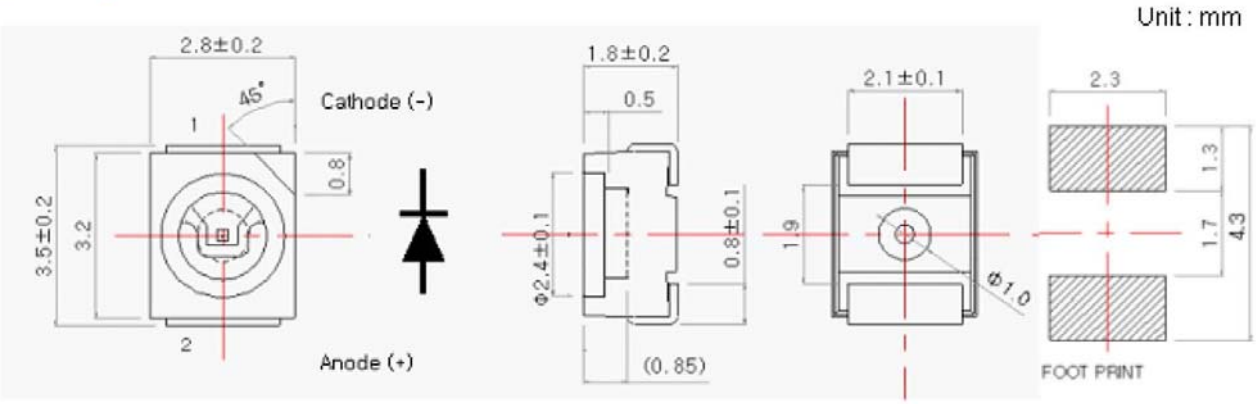


1. Basic Feedback Ammeter



2. Feedback Ammeter with Selective Voltage Gain

Package Dimension



ROITHNER LASERTECHNIK
A-1040 Vienna, Austria
Wiedner Hauptstrasse 76, Top 9/1
Tel.: +43-1-586 52 43 - 0
Fax.: +43-1-586 52 43 44
e-mail: office@roithner-laser.com
http://www.roithner-laser.com