

UV / Visible Sensor

GVBL-S12SD

Features

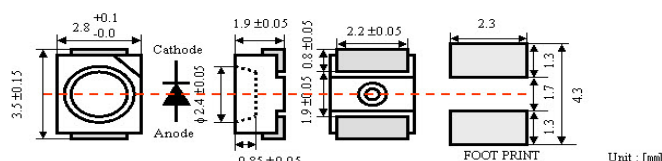
- SMD3528 with Si-encapsulant
- Indium Gallium Nitride Based Material
- PN-type Photodiode
- Photovoltaic Mode Operation
- High Responsivity & Low Dark Current



Applications

- UV LED Monitoring (385, 405nm, etc.)
- Blue LED Monitoring
- UVA Lamp Monitoring
- UV Curing

Outline Diagrams and Dimensions



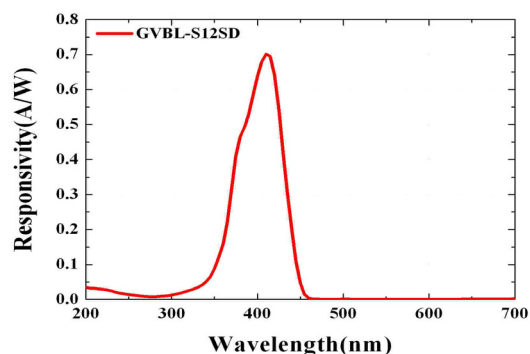
Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	T_{st}	-40	90	°C	
Operating Temperature	T_{op}	-30	85	°C	
Reverse Voltage	$V_{r, max.}$		5	V	
Forward Current	$I_{f, max.}$		1	mA	
Soldering Temperature	T_{sol}		260	°C	within 10 sec.

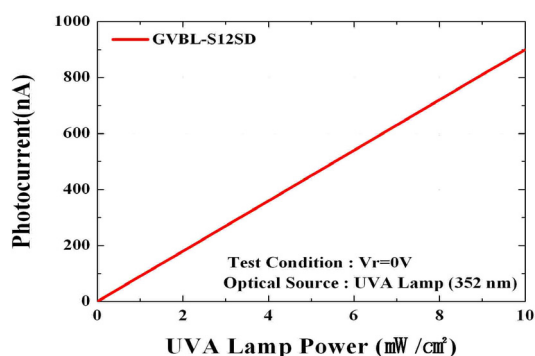
Characteristics (at 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	I_d			1	nA	$V_r = 0.1 V$
Photo Current	I_{ph}		90		nA	UVA (352nm), 1mW/cm ²
			790		nA	405nm LED, 1mW/cm ²
Responsivity	R		0.68		A/W	$\lambda = 405 nm, V_r = 0 V$
Spectral Detection Range	λ	345		450	nm	10% of R

Responsivity Curve



Photocurrent along UV Power



Caution