

UV / Visible Sensor

GVBL-T15GD



Features

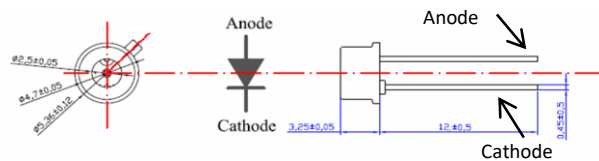
TO-46 with quartz glass
Indium Gallium Nitride Based Material
PN-type Photodiode
Photovoltaic Mode Operation
High Responsivity & Low Dark Current



Applications

UV LED Monitoring (365, 385nm, etc.)
Blue LED Monitoring
UVA Lamp Monitoring
UV Curing

Outline Diagrams and Dimensions



Absolute Maximum Ratings

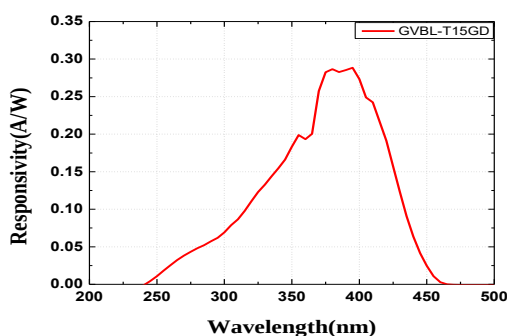
Parameter	Symbol	Min.	Max.	Unit	Remark
Storage Temperature	T_{st}	-40	90	°C	
Operating Temperature	T_{op}	-30	85	°C	
Reverse Voltage	$V_{r, max.}$		5	V	
Forward Current	$I_{f, max.}$		1	mA	
Optical Source Power Range	P_{opt}	0.01	100	mW/cm ²	UV LED
Soldering Temperature	T_{sol}		260	°C	within 10 sec.

※Notice: apply to us in the case that Optical Source Power is over 100mW/cm²

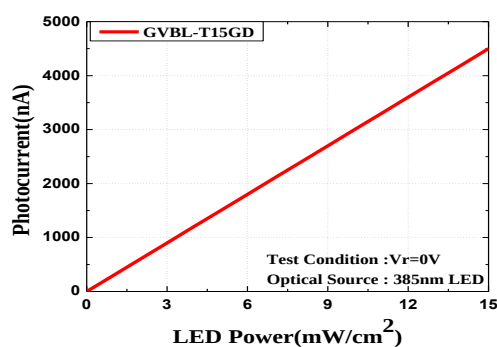
Characteristics (at 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Dark Current	I_d			1	nA	$V_r = 0.1$ V
Photo Current	I_{ph}		300		nA	LED (385nm), 1 mW/cm ²
Temperature Coefficient	I_{tc}		-0.05		%/°C	UV LED
Responsivity	R		0.288		A/W	$\lambda = 385$ nm, $V_r = 0$ V
Spectral Detection Range	λ	265		450	nm	10% of R

Responsivity Curve



Photocurrent along LED Power



Caution

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

No.	REV.	History	날짜
1	1	GVBL-T14GD Discontinue => GVBL-T15GD Chip characteristics change (Responsivity, Photocurrent,detection range) => Photocurrent 1mW/cm² @385nm UV LED : GVBL-T14GD 830nA=>GVBL-T15D: 300nA Detection range : 345~445nm=>265~450nm	2026.07.20