

## **FEATURES**

#### 365nm UVA response

- Visible & NIR blind
- Photovoltaic operation
- · High shunt resistance

## **DESCRIPTION**

The **PDU-G101A** is a GaN UV photodiode with a spectral range from 200nm to 365nm and is ideal for UVA sensing applications available in a TO-46 can

package.

#### **APPLICATIONS**

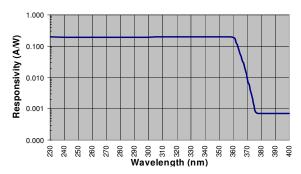
- UVA power meters
- · Sun dosimeters
- · Flame detectors
- UV instrumentation

## ABSOLUTE MAXIMUM RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	PARAMETER	MIN	MAX	UNITS
$V_{BR}$	Reverse Voltage		5	V
T <sub>STG</sub>	Storage Temperature	-40	+90	∞
To	Operating Temperature	-30	+85	∞
Ts	Soldering Temperature*		+260	∞

<sup>\* 1/16</sup> inch from case for 3 seconds max.

# **SPECTRAL RESPONSE**



## ELECTRO-OPTICAL CHARACTERISTICS RATING (TA)= 23 °C UNLESS OTHERWISE NOTED

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I <sub>SC</sub>	Short Circuit Current	UVI = 1		1		nA
$I_{D}$	Dark Current	$V_R = 1V$		0.05	1	nA
$R_{SH}$	Shunt Resistance	$V_R = 10 \text{ mV}$	0.45	1		$\mathbf{G}\Omega$
CJ	Junction Capacitance	$V_R = 0V, f = 1 MHz$		24		pF
$\lambda$ range	Spectral Application Range	Spot Scan	200		365	nm
R	Responsivity	$\lambda$ = 350nm V, V <sub>R</sub> = 0 V		0.10		A/W
$V_{BR}$	Breakdown Voltage	I = 1 μA		10		V
NEP	Noise Equivalent Power	$V_R$ = 10V @ $\lambda$ = Peak		1X10 <sup>-13</sup>		$W/\sqrt{Hz}$
t <sub>r</sub>	Response Time	$RL = 1K\Omega, V_R = 1V$		10	15	nS

Information in this technical datasheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice.