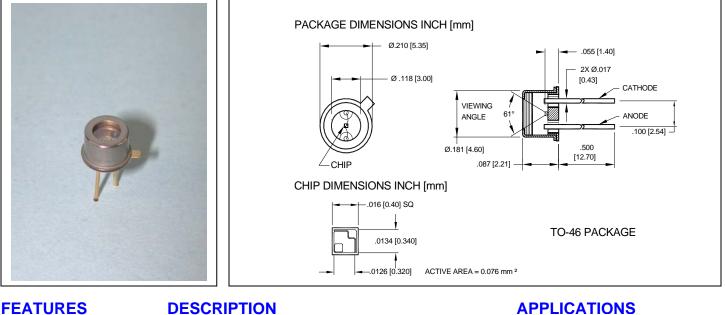
# **UV Enhanced GaN Detectors**



## **PDU-G102B**



#### **FEATURES**

- 320nm UVB response
- Visible & NIR blind
- Photovoltaic operation
- High shunt resistance
- UVB sensing applications available in a TO-46 can

package.

- The PDU-G102B is a GaN UV photodiode with a spectral range from 200nm to 320nm and is ideal for
- · Sun dosimeters UV epoxy curing

APPLICATIONS

UVB power meters

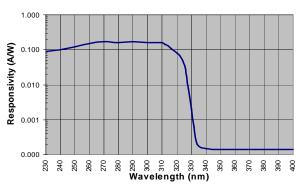
UV instrumentation

#### SPECTRAL RESPONSE

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

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

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



### 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 <sub>D</sub>	Dark Current	$V_R = 1V$		50	100	$\mu {\sf A}$
R <sub>SH</sub>	Shunt Resistance	$V_R = 10 \text{ mV}$	0.45	1		GΩ
CJ	Junction Capacitance	$V_R = 0V, f = 1 MHz$		24		pF
$\lambda$ range	Spectral Application Range	Spot Scan	200		320	nm
R	Responsivity	$\lambda$ = 350nm V, V <sub>R</sub> = 0 V		0.10		A/W
V <sub>BR</sub>	Breakdown Voltage	I = 1μΑ		10		V
t <sub>r</sub>	Response Time**	$RL = 1K\Omega, V_R = 1V$		10	15	nS

\*\*Response time of 10% to 90% is specified at 660nm wavelength light.

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.

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