

### FEATURES

- 365nm UVA response
- Visible & NIR blind
- Photovoltaic operation
- High shunt resistance

### DESCRIPTION

The **PDU-G105A-SM** is a GaN UV photodiode with a spectral range from 200nm to 365nm and is ideal for UVA sensing applications available in an SMD package.

### APPLICATIONS

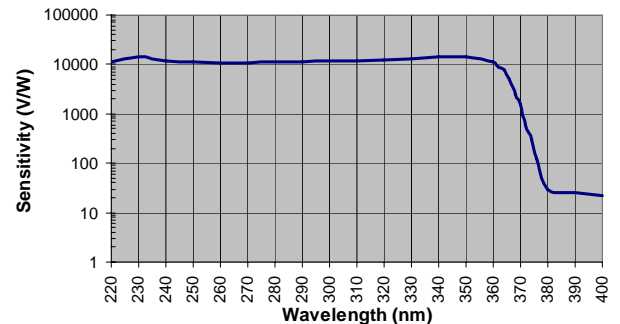
- UVA power meters
- Sun dosimeters
- Flame detectors
- UV instrumentation

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

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

\* 1/16 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 <sub>D</sub>	Dark Current	V <sub>R</sub> = 1V		50	100	µA
R <sub>SH</sub>	Shunt Resistance	V <sub>R</sub> = 10 mV	0.45	1		GΩ
C <sub>J</sub>	Junction Capacitance	V <sub>R</sub> = 0V, f = 1 MHz		24		pF
λ range	Spectral Application Range	Spot Scan	200		365	nm
R	Responsivity	λ = 350nm V, V <sub>R</sub> = 0 V		0.10		A/W
V <sub>BR</sub>	Breakdown Voltage	I = 1 µA		10		V
t <sub>r</sub>	Response Time**	RL = 1KΩ, V <sub>R</sub> = 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.