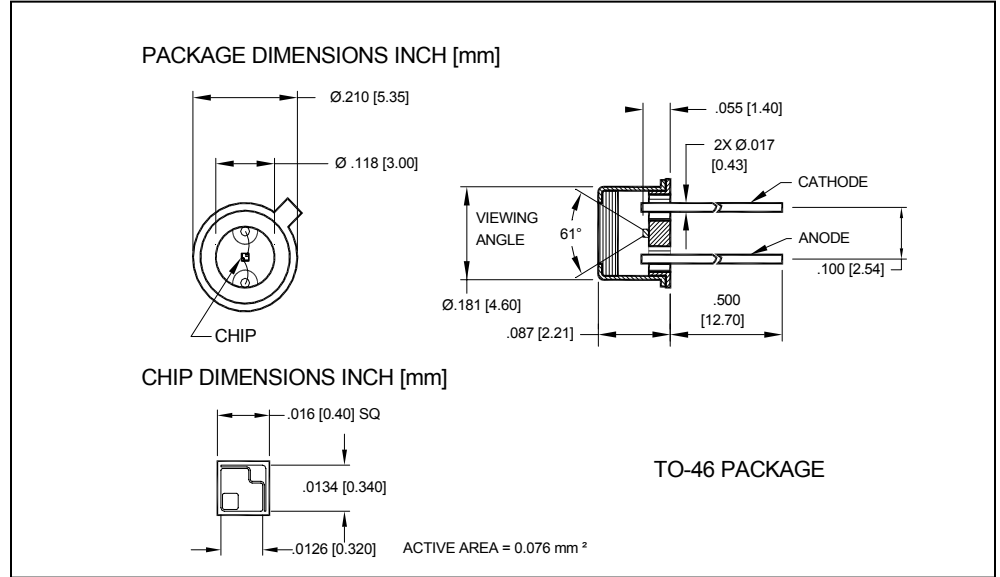




## FEATURES

- 365nm UVB 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 UVB sensing applications available in a TO-18 can package.

## APPLICATIONS

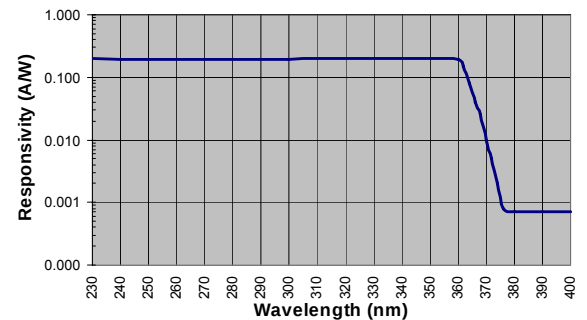
- UVB power meters
- Sun dosimeters
- UV epoxy curing
- UV instrumentation

## 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               |      | 0.05                | 1   | nA    |
| 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 <sub>range</sub> | 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 = 1μA                           |      | 10                  |     | V     |
| NEP                | Noise Equivalent Power     | V <sub>R</sub> = 10V @ λ = Peak   |      | 1X10 <sup>-13</sup> |     | W/√Hz |
| t <sub>r</sub>     | Response Time              | RL = 1KΩ, V <sub>R</sub> = 1V     |      | 10                  | 15  | nS    |