

FEATURES

- 320nm UVB response
- Visible & NIR blind
- Photovoltaic operation
- High shunt resistance

DESCRIPTION

The **PDU-G106B-SM** is a GaN UV photodiode with a spectral range from 200nm to 320nm and is ideal for UVB sensing applications available in an SMD package.

APPLICATIONS

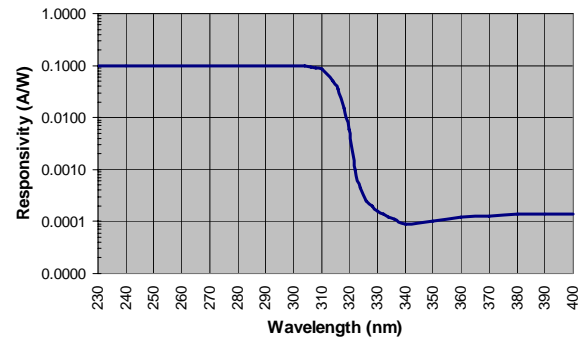
- UVB power meters
- Sun dosimeters
- UV epoxy curing
- UV instrumentation

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

| SYMBOL | PARAMETER | MIN | MAX | UNITS |
|------------------|------------------------|-----|------|-------|
| V _{BR} | Reverse Voltage | | 5 | V |
| T _{STG} | Storage Temperature | -40 | +90 | °C |
| T _O | Operating Temperature | -30 | +85 | °C |
| T _S | 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 _{SC} | Short Circuit Current | UVI = 1 | | 1 | | nA |
| I _D | Dark Current | V _R = 1V | | 50 | 100 | µA |
| R _{SH} | Shunt Resistance | V _R = 10 mV | 0.45 | 1 | | GΩ |
| C _J | Junction Capacitance | V _R = 0V, f = 1 MHz | | 24 | | pF |
| λ range | Spectral Application Range | Spot Scan | 200 | | 320 | nm |
| R | Responsivity | λ = 350nm V, V _R = 0 V | | 0.10 | | A/W |
| V _{BR} | Breakdown Voltage | I = 1 µA | | 10 | | V |
| t _r | Response Time** | RL = 1KΩ, 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.