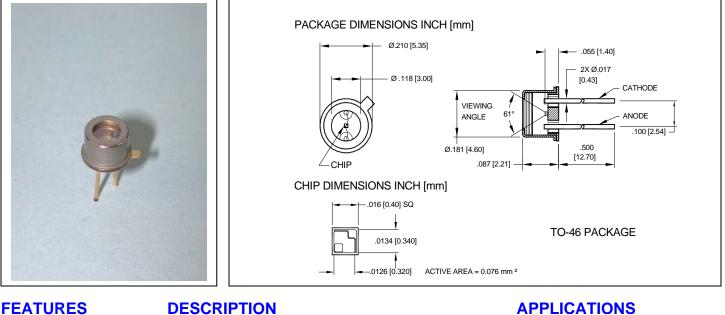
UV Enhanced GaN Detectors



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

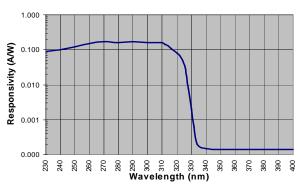
UV instrumentation

SPECTRAL RESPONSE

| SYMBOL | PARAMETER | MIN | MAX | UNITS |
|------------------|------------------------|-----|------|-------|
| V _{BR} | Reverse Voltage | | 5 | V |
| T _{STG} | 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 _{SC} | Short Circuit Current | UVI = 1 | | 1 | | nA |
| I _D | Dark Current | $V_R = 1V$ | | 50 | 100 | $\mu {\sf A}$ |
| R _{SH} | Shunt Resistance | $V_R = 10 \text{ mV}$ | 0.45 | 1 | | GΩ |
| CJ | 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 = 1μΑ | | 10 | | V |
| t _r | 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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