**UV-A Sensor**

**Features**
- Indium Gallium Nitride Based Material
- Schottky-type Photodiode
- Photovoltaic Mode Operation
- High Responsivity & Low Dark Current

**Applications**
- UV-A Lamp Monitoring

**Absolute Maximum Ratings**

<table>
<thead>
<tr>
<th>Item</th>
<th>Symbol</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward Current</td>
<td>I&lt;sub&gt;F&lt;/sub&gt;</td>
<td>1</td>
<td>mA</td>
</tr>
<tr>
<td>Reverse Voltage</td>
<td>V&lt;sub&gt;R&lt;/sub&gt;</td>
<td>2</td>
<td>V</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>T&lt;sub&gt;op&lt;/sub&gt;</td>
<td>-30 ... +85</td>
<td>°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>T&lt;sub&gt;st&lt;/sub&gt;</td>
<td>-40 ... +90</td>
<td>°C</td>
</tr>
<tr>
<td>Soldering Temperature</td>
<td>T&lt;sub&gt;sol&lt;/sub&gt;</td>
<td>260</td>
<td>°C</td>
</tr>
</tbody>
</table>

* must be completed within 10 seconds

**Characteristics (25°C)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Symbol</th>
<th>Test Conditions</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark Current</td>
<td>I&lt;sub&gt;D&lt;/sub&gt;</td>
<td>V&lt;sub&gt;R&lt;/sub&gt; = 0.1 V</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>nA</td>
</tr>
<tr>
<td>Photo Current</td>
<td>I&lt;sub&gt;PD&lt;/sub&gt;</td>
<td>UVA Lamp, 1 mW/cm²</td>
<td>-</td>
<td>181</td>
<td>-</td>
<td>nA</td>
</tr>
<tr>
<td>Temperature Coefficient</td>
<td>I&lt;sub&gt;TC&lt;/sub&gt;</td>
<td>UVA Lamp</td>
<td>-</td>
<td>0.1</td>
<td>-</td>
<td>% / °C</td>
</tr>
<tr>
<td>Responsivity</td>
<td>R</td>
<td>λ = 360 nm, V&lt;sub&gt;R&lt;/sub&gt; = 0 V</td>
<td>-</td>
<td>0.18</td>
<td>-</td>
<td>A/W</td>
</tr>
<tr>
<td>Spectral Detection Range</td>
<td>λ</td>
<td>10% of R</td>
<td>240</td>
<td>-</td>
<td>395</td>
<td>nm</td>
</tr>
</tbody>
</table>

**Package Dimension**

Unit: [mm]
Photocurrent along UV Power

Responsivity Curve

**Photocurrent along UV Power**

- **Graph Description:**
  - **x-axis:** UV-A Power (mW/cm²)
  - **y-axis:** Photocurrent (A)
  - **Legend:**
    - Red line: GUVV-S10SD
    - Test Condition: V=0V
    - Optical Source: UV-A Lamp (365 nm)

**Responsivity Curve**

- **Graph Description:**
  - **x-axis:** Wavelength (nm)
  - **y-axis:** Responsivity (A/W)

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