UV - Photodetector with integrated amplifier

JIC 167 B  
JIC 168 B  
JIC 169 B

**characteristics:**
- integrated UV-B filter
- spectral range: 280 ... 325 nm
- active area: 0.965 mm²
- responsivity, decadic staggering: 0.4/4/40 mV/nW
- extra sensor pin for external adjustment of gain and bandwidth
- single supply voltage
- sensor assembly isolated to ground
- hermetically welded TO5-metal/glass package
- components are in conformity with RoHS and WEEE

**applications:**
- selective UV-measurement
- control of sterilization lamps
- flamedetection and flamecontrol
- control of irradiancy in varnish and adhesive hardening

**absolute maximum ratings:**

<table>
<thead>
<tr>
<th>parameter</th>
<th>test condition</th>
<th>JIC167B</th>
<th>JIC168B</th>
<th>JIC169B</th>
<th>unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>supply voltage</td>
<td></td>
<td>+5.5</td>
<td></td>
<td></td>
<td>V</td>
</tr>
<tr>
<td>working temperature range</td>
<td></td>
<td>-25 °C</td>
<td>+85</td>
<td></td>
<td>°C</td>
</tr>
<tr>
<td>storage temperature range</td>
<td></td>
<td>-40 °C</td>
<td>+100</td>
<td></td>
<td>°C</td>
</tr>
<tr>
<td>welding temperature (5s)</td>
<td></td>
<td>300</td>
<td></td>
<td></td>
<td>°C</td>
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</tbody>
</table>

**technical data:**

Common test conditions, as not otherwise specified: \( T_A = 25 °C, V_S = +5 \) V

Typical values, maximum values in brackets.
relative spectral responsivity

pin configuration

package dimension

application hints:

- If an external resistor for reduction of gain is used, please make sure that length of connectors is as short as possible to reduce noise and capacitive interference.

- If internally adjusted gain is used only, please cut pin “1”. 