characteristics:

- monolithic SiC-quadrant-photodiode with common cathode
- active area: 4 x 1.25 mm²
- spectral range: 215 ... 360 nm
- high UV responsivity: 0.16 A/W
- hermetically sealed TO39-package
- component is ROHS and WEE conform

applications:

- center detection of laser beams
- high resolution autocollimators
- xy – coordinate measuring machines
- fibre optical acceleration- and angle sensors
- application with need of high position resolution

maximum ratings:

- reverse voltage: 20 V
- operating temperature range: -40 °C ... 100 °C
- storage temperature range: -40 °C ... 100 °C
- soldering temperature (3s): 260 °C

technical data:

test conditions, as not otherwise specified: $T_A = 25 \, ^\circ\text{C}$, $V_R = 10 \, \text{V}$
values are valid for one quadrant, as not otherwise specified!

<table>
<thead>
<tr>
<th>parameter</th>
<th>test condition</th>
<th>min.</th>
<th>typ.</th>
<th>max.</th>
<th>unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>active area</td>
<td></td>
<td>1.25</td>
<td></td>
<td></td>
<td>mm²</td>
</tr>
<tr>
<td>diameter of active area</td>
<td></td>
<td>2.525</td>
<td></td>
<td></td>
<td>mm</td>
</tr>
<tr>
<td>separation gap</td>
<td></td>
<td>32</td>
<td></td>
<td></td>
<td>µm</td>
</tr>
<tr>
<td>maximum of spectral responsivity $S_{\text{max}}$ at</td>
<td></td>
<td></td>
<td></td>
<td>270</td>
<td>nm</td>
</tr>
<tr>
<td>spectral range</td>
<td>$\lambda_{\text{min}}$</td>
<td>$S = 0.1 \times S_{\text{max}}$</td>
<td></td>
<td>215</td>
<td>nm</td>
</tr>
<tr>
<td></td>
<td>$\lambda_{\text{max}}$</td>
<td>360</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>absolute spectral responsivity $S_{\text{max}}$</td>
<td>$\lambda = 254$ nm</td>
<td>0.14</td>
<td></td>
<td></td>
<td>A/W</td>
</tr>
<tr>
<td>dark current $I_R$</td>
<td>$E = 0$ lx</td>
<td>100</td>
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<td></td>
<td>fA</td>
</tr>
<tr>
<td>risetime $t_r$ of photo current</td>
<td>$R_L = 50$ Ω, $\lambda = 254$ nm, $I_P = 10$ µA</td>
<td>tbc</td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>capacitance</td>
<td>$F = 1$ MHz, $E = 0$ lx</td>
<td>250</td>
<td></td>
<td></td>
<td>pF</td>
</tr>
</tbody>
</table>
relative spectral responsivity

package dimension

pin configuration

1 anode quadrant 1
2 anode quadrant 2
3 anode quadrant 3
4 anode quadrant 4
5 cathode & case