

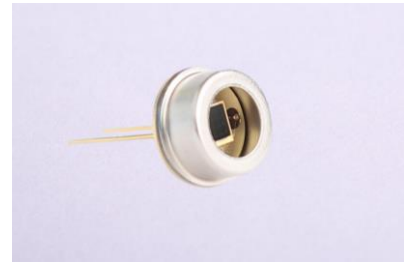


## VUV photodiode

Model ST-VUV6

### General Features:

- SiC-based vacuum ultraviolet (VUV) photodiode
- Excellent stability under high fluence VUV exposure
- Photovoltaic mode operation
- Visible blind and low dark current
- High detection efficiency for 193 nm VUV radiation
- TO-39 metal housing with sapphire window

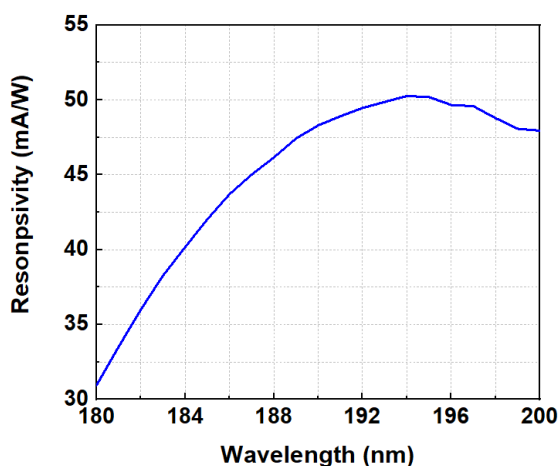


**Applications:** VUV radiation flux measurement, 193 nm excimer laser monitoring

### Specifications:

| Parameters                                     | Symbol      | Value  | Unit            |
|--|-------------|--------|-----------------|
| <b>Maximum ratings</b>                         |             |        |                 |
| Operation temperature range                    | $T_{opt}$   | -20-80 | °C              |
| Storage temperature range                      | $T_{sto}$   | -55-90 | °C              |
| Soldering temperature (3 s)                    | $T_{sol}$   | 260    | °C              |
| Maximum reverse voltage                        | $V_{r-max}$ | -20    | V               |
| <b>Electro-Optical characteristics (25 °C)</b> |             |        |                 |
| Chip size                                      | A           | 6.25   | mm <sup>2</sup> |
| Responsivity (@ 193 nm)                        | R           | 50     | mA/W            |
| Dark current ( $V_r = -5$ V)                   | $I_d$       | < 10   | pA              |
| Capacitance (@ 0 V and 1 MHz)                  | $C_p$       | 170    | pF              |
| Rise Time ( $V_r=0$ V, $R_L=50$ )              | $t_r$       | < 1    | S               |

### Spectral response



### Package dimensions (unit: mm)

