

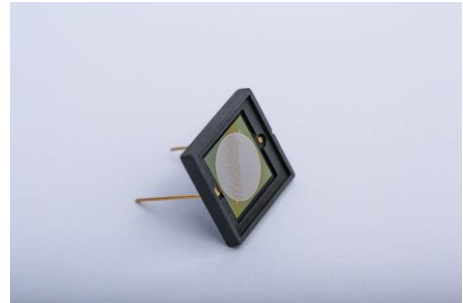


# VUV photodiode

Model **SCT-VUV64**

## 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
- Ceramic package

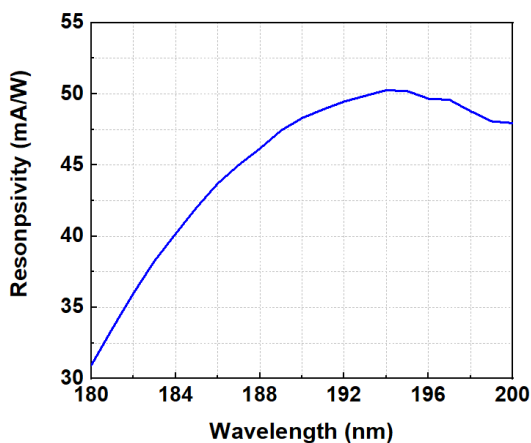


**Applications:** VUV radiation flux measurement, 193 nm excimer laser monitoring

## 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              |
| Maxium reverse voltage                         | $V_{r-max}$ | -20    | V               |
| <b>Electro-Optical characteristics (25 °C)</b> |             |        |                 |
| Effective photo-sensitive area                 | A           | 63.5   | mm <sup>2</sup> |
| Responsivity (@193 nm)                         | R           | 50     | mA/W            |
| Dark current (@-1 V)                           | $I_d$       | < 100  | pA              |
| Shunt resistance (@±10 mV)                     | $R_{sh}$    | > 10   |                 |
| Capacitance (@ 0 V and 1 MHz)                  | $C_p$       | 2.4    | nF              |
| Rise time ( $V_r=0$ V, $R_L=50$ )              | $t_r$       | < 2    | S               |

## Spectral response



## Package dimensions

