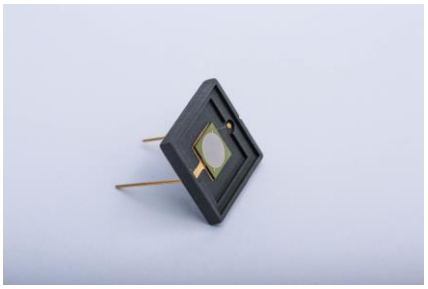
# VUV photodiode Model：SCT-VUV20

## General Features:



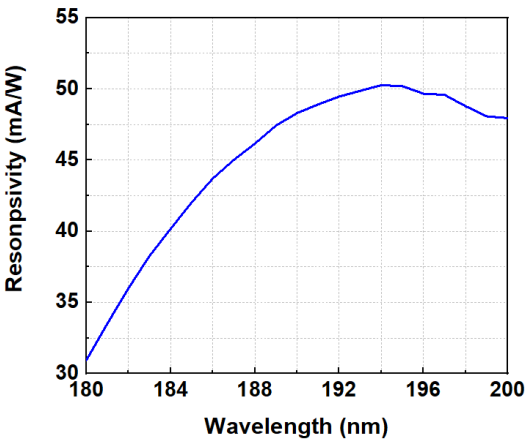
- SiC-based vacuum ultraviolet (VUV) photodiode
- Excellent stability under high fluence VUV exposure
- Photovoltaic mode operation
- Visible blind and low dark current
- High detection efficiency for 193 nm VUV radiation
- Ceramic package

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

## Specifications:

| Parameters | Symbol | Value | Unit |
|---|---|---|---|
| **Maximum ratings** | | | |
| 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 | $V_{r\text{-}max}$ | -20 | V |
| **Electro-Optical characteristics (25 °C)** | | | |
| Effective photo-sensitive area | A | 19.6 | $mm^2$ |
| Responsivity (@193 nm) | R | 50 | mA/W |
| Dark current (@-1 V) | $I_d$ | < 100 | pA |
| Shunt resistance (@±10 mV) | $R_{sh}$ | > 10 | GΩ |
| Capacitance (@ 0 V and 1 MHz) | $C_p$ | 565 | pF |
| Rise time ($V_r$=0 V, $R_L$=50 Ω) | $t_r$ | < 1 | μS |

## Spectral response




## Package dimensions

