

# **EUV** photodiode

## Model SCT-EUV64

### **General Features:**

- SiC-based extreme ultraviolet (EUV) photodiode
- Excellent stability under high fluence EUV exposure
- Photovoltaic mode operation
- Visible blind and low dark current
- High detection efficiency for 13.5 nm EUV radiation
- Ceramic package

**Applications:** EUV radiation monitoring and flux measurement



Parameters	Symbol	Value	Unit
Maximum ratings			
Operation temperature range	T <sub>opt</sub>	-20-80	∘C
Storage temperature range	T <sub>sto</sub>	-55-90	°C
Soldering temperature (3 s)	T <sub>sol</sub>	260	°C
Maxium reverse voltage	$V_{r\text{-max}}$	-20	V
Electro-Optical characteristics (25 °C)			
Chip size	А	63.5	mm²
Spectral response range		5-125	nm
Responsivity (@ 13.5 nm)	R	58	mA/W
Dark current (V <sub>r</sub> = -1V)	I <sub>d</sub>	< 100	рА
Shunt resistance (@±10mV)	R <sub>sh</sub>	>10	G
Capacitance (@ 0 V and 1 MHz)	Cp	2.4	nF
Rise Time (V <sub>r</sub> =0 V, R <sub>L</sub>	t <sub>r</sub>	< 2	S

### **Spectral response**

#### 90 80 70 70 40 30 20 20 40 60 80 100 120 Wavelength (nm)

## Package dimensions (unit: mm)

