

EUV photodiode

Model SCT-EUV20

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

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)			
Chip size	Α	19.6	mm²
Spectral response range		5-125	nm
Responsivity (@ 13.5 nm)	R	58	mA/W
Dark current (V _r = -1V)	l _d	< 100	pА
Shunt resistance (@±10mV)	R_{sh}	>10	G
Capacitance (@ 0 V and 1 MHz)	Cp	565	pF

Rise Time ($V_r=0\ V,\ R_L$