

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: p

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)	I _d	< 100	pA
Shunt resistance (@±10mV)	R _{sh}	>10	G
Capacitance (@ 0 V and 1 MHz)	Cp	565	pF

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