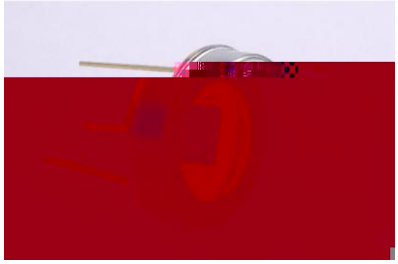
VUV photodiode

Model ST-VUV25

General Features:



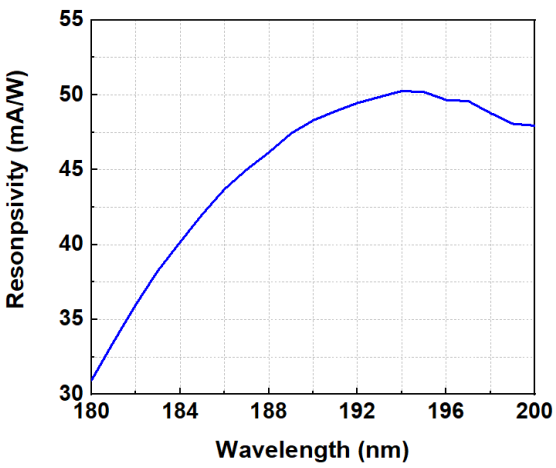
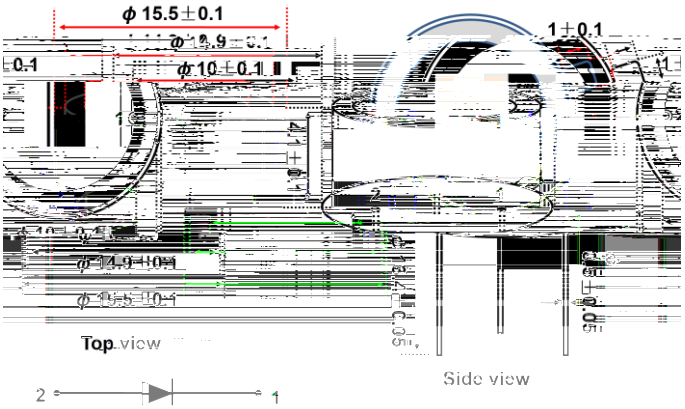
- SiC-based vacuum ultraviolet (VUV) photodiode
- Excellent stability under high fluence VUV exposure
- Photovoltaic mode operation
- Visible blind and low dark current
- High detection efficiency for 193 nm VUV radiation
- TO-8 metal housing with sapphire window

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

Specifications:

Parameters	Symbol	Value	Unit
Maximum ratings			
Operation temperature range	T_{opt}	-20-80	^oC
Storage temperature range	T_{sto}	-55-90	^oC
Soldering temperature (3 s)	T_{sol}	260	^oC
Maxium reverse voltage	$V_{r\text{-}max}$	-20	V
Electro-Optical characteristics (25 ^oC)			
Chip size	A	25	mm^2
Responsivity (@ 193 nm)	R	50	mA/W
Dark current (V_r = -5 V)	I_d	< 10	pA
Capacitance (@ 0 V and 1 MHz)	C_p	960	pF
Rise Time (V_r=0 V, R_L=50 Ω)	t_r	< 2	μS

Spectral response



Package dimensions (unit: mm)