

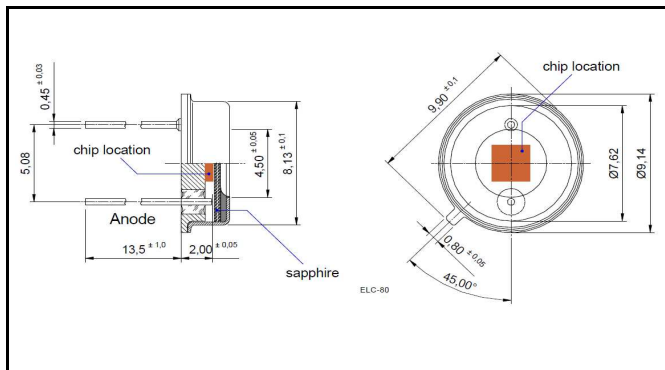
Data Sheet

UV photodiode

EOPD-150-0-3.6

Radiation	Type	Technology	Case
VUV - visible	Schottky contact	GaP	TO-39

Description:	
Wide bandwidth and high sensitivity from VUV up to the visible spectrum (150 nm - 550 nm), mounted in hermetically sealed TO-39 package with sapphire window	
Application:	
Medical engineering (dermatology), output check of UV - lamps and oil or gas burner flame, measurement and control of ecological parameters, radiation control for a solarium, UV water purification facilities	



Maximum Ratings

T_{amb} = 25°C, unless otherwise specified

Parameter	Symbol	Value	Unit
Active area	A	10.9	mm ²
Temperature coefficient of dark current	TC(I _D)	7	%/K
Operating temperature range	T _{amb}	-40 to +125	°C
Storage temperature range	T _{stg}	-40 to +125	°C
Acceptance angle at 50% S _λ	φ	120	deg.

Optical and Electrical Characteristics

T_{amb} = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Breakdown voltage ¹⁾	I _R =10 μA	V _R	5			V
Dark current	V _R =5 V	I _D		20	80	pA
Peak sensitivity wavelength	V _R =0 V	λ _p		440		nm
Responsivity at λ _p	V _R =0 V	S _λ	0.1	0.13		A/W
Sensitivity range at 1%	V _R =0 V	λ _{min} , λ _{max}	150		550	nm
Spectral bandwidth at 50%	V _R =0 V	Δλ _{0.5}		180		nm
Shunt resistance	V _R =10 mV	R _{SH}	50	70		GΩ
Noise equivalent power	λ = 440 nm	NEP		1.5 x 10 ⁻¹⁴		W/√Hz
Specific detectivity	λ = 440 nm	D*		2.2 x 10 ¹³		cm · √Hz · W ⁻¹
Junction capacitance	V _R =0 V	C _J		2600		pF
Photocurrent at = 254 nm ¹⁾	V _R =0 V	I _{ph}		5.4		μA
	E _e =1 mW/cm ²					

¹⁾ for information only

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Typical responsivity

