

Wavelength	Type	Technology	Case
UV	Schottky Contact	GaP	TO-39 + lens + UG-11 filter

Description

Wide bandwidth and high spectral sensitivity in the UV range (245 nm - 400 nm), mounted in hermetically sealed TO-39 package with lens cap and UG11 UV filter-glass window

Applications

Medical engineering (dermatology), output check of UV - lamps and gas burner flame, measurement and control of ecological parameters, radiation control for a solarium, UV water purification facilities

Miscellaneous Parameters

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

Parameter	Test conditions	Symbol	Value	Unit
Active area / Effective active area		A / A _{eff}	0.51 / 15.3	mm ²
Temperature coefficient of I _D		T _C (I _D)	7.0	%/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	30	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		5	20	pA
Peak sensitivity wavelength	V _R = 0 V	λ _p		365		nm
Responsivity at λ _p	V _R = 0 V	S _λ		0.07		A/W
Sensitivity range at 1%	V _R = 0 V	λ _{min} , λ _{max}	245		400	nm
Spectral bandwidth at 50%	V _R = 0 V	Δλ _{0.5}		85		nm
Shunt resistance	V _R = 10 mV	R _{SH}	100	125		GΩ
Noise equivalent power	λ = 365 nm	NEP		1.9x10 ⁻¹⁴		W/√Hz
Specific detectivity	λ = 365 nm	D*		2.1x10 ¹²		cm · √Hz · W ⁻¹
Junction capacitance	V _R = 0 V	C _J		120		pF
Switching time (R _L = 50 Ω)	V _R = 5 V	t _r , t _f		1/10		ns
Photo current at λ = 365 nm ^{1,2)}	V _R = 0 V E _e = 1 mW/cm ²	I _{ph}		4		μA

¹⁾for information only

²⁾measured with common halogen lamp source and appropriate filter

Note: All measurements carried out with *EPIGAP* equipment

Labeling

Type	Lot N°	R _D (typ.) [GΩ]	Quantity
EPD-365-0-0.9-1			

Typical responsivity

