

Wavelength	Type	Technology	Case
Blue - Green	Integrated filter	GaP	5 mm plastic lens

	Description Selective photodiode chip in standard 5 mm package. Narrow bandwidth and high spectral sensitivity in the range of 400 - 560 nm. Housing without standoff leads.
	Note: Special packages with standoff available on request Applications Optical communications, safety equipment, automation, analytics, fluorescence detection

Miscellaneous Parameters

$T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.17	mm ²
Temperature coefficient of I_D		$T_C(I_D)$	5	%/K
Operating temperature range		T_{amb}	-40 to +85	°C
Storage temperature range		T_{stg}	-40 to +100	°C
Acceptance angle at 50% S_{λ}		φ	20	deg.

Optical and Electrical Characteristics

$T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Breakdown voltage ¹⁾	$I_R = 10 \mu\text{A}$	V_R		10		V
Dark current	$V_R = 5 \text{ V}$	I_D		5	30	pA
Peak sensitivity wavelength	$V_R = 0 \text{ V}$	λ_p	460	470	480	nm
Responsivity at 470 nm	$V_R = 0 \text{ V}$	S_{λ}		0.3		A/W
Sensitivity range at 1% ¹⁾	$V_R = 0 \text{ V}$	$\lambda_{min}, \lambda_{max}$	385		565	nm
Spectral bandwidth at 50%	$V_R = 0 \text{ V}$	$\Delta\lambda_{0.5}$		100		nm
Shunt resistance	$V_R = 10 \text{ mV}$	R_{SH}	70	100		GΩ
Noise equivalent power	$\lambda = 470 \text{ nm}$	NEP		4.4×10^{-15}		W/ $\sqrt{\text{Hz}}$
Specific detectivity	$\lambda = 470 \text{ nm}$	D^*		9.3×10^{12}		$\text{cm} \cdot \sqrt{\text{Hz}} \cdot \text{W}^{-1}$
Junction capacitance	$V_R = 0 \text{ V}$	C_J		120		pF
Switching time ($R_L = 50 \Omega$)	$V_R = 5 \text{ V}$	t_r, t_f		200		ns
Photo current at Illuminant A	$V_R = 0 \text{ V}$ $E_v = 1000 \text{ lx}$	I_{Ph}		0.2		μA

¹⁾for information only

Note: All measurements carried out with *EPIGAP* equipment

Labeling

Type	Lot N°	R_D (typ.) [GΩ]	Quantity
EPD-470-5-0.5			

