

Wavelength	Type	Technology	Case
Blue-Green	water clear	GaP	3 mm plastic lens

	<p>Description</p> <p>Selective photodiode mounted in standard 3 mm package with standoff. Narrow bandwidth and high spectral sensitivity in the range of max. eye responsivity (500...600 nm).</p> <p>Note: Special packages without standoff available on request</p> <p>Applications</p> <p>light barriers, automation, optical analytics</p>
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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}	-20 to +85	°C
Storage temperature range		T_{stg}	-40 to +125	°C
Soldering Temperature	$t \leq 3$ s, 3 mm from case	T_{sld}	260	°C
Acceptance angle at 50% S_{λ}		φ	60	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	5			V
Dark current	$V_R = 5$ V	I_D		5	30	pA
Peak sensitivity wavelength	$V_R = 0$ V	λ_p		525		nm
Responsivity at λ_p	$V_R = 0$ V	S_{λ}		0.3		A/W
Sensitivity range at 1% ¹⁾	$V_R = 0$ V	$\lambda_{min}, \lambda_{max}$	500		600	nm
Spectral bandwidth at 50%	$V_R = 0$ V	$\Delta\lambda_{0.5}$		70		nm
Shunt resistance	$V_R = 10$ mV	R_{SH}		310		GΩ
Noise equivalent power	$\lambda = 525$ nm	NEP		4.3×10^{-15}		W/ $\sqrt{\text{Hz}}$
Specific detectivity	$\lambda = 525$ nm	D^*		9.6×10^{12}		cm $\cdot\sqrt{\text{Hz}}\cdot\text{W}^{-1}$
Junction capacitance	$V_R = 0$ V	C_J		25		pF
Switching time ($R_L = 50 \Omega$)	$V_R = 1$ V	t_r, t_f		30		ns
Photocurrent at illuminant A ^{1,2)}	$V_R = 0$ V $E_V = 1000$ lx	I_{Ph}		67		nA

¹⁾for information only

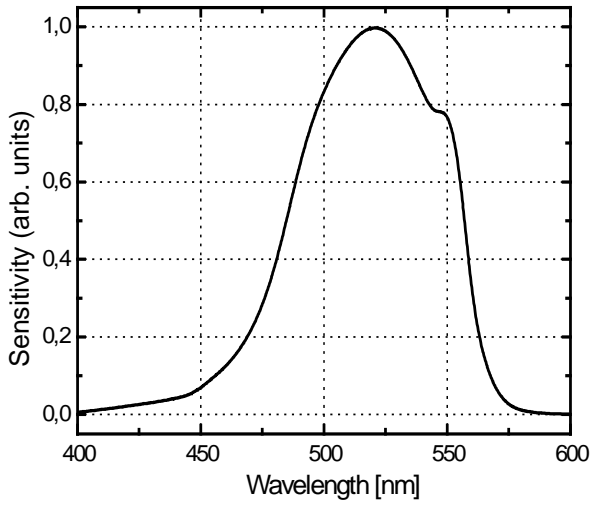
²⁾ Standard light source with a color temperature of 2856 K

Note: All measurements carried out with *EPIGAP* equipment

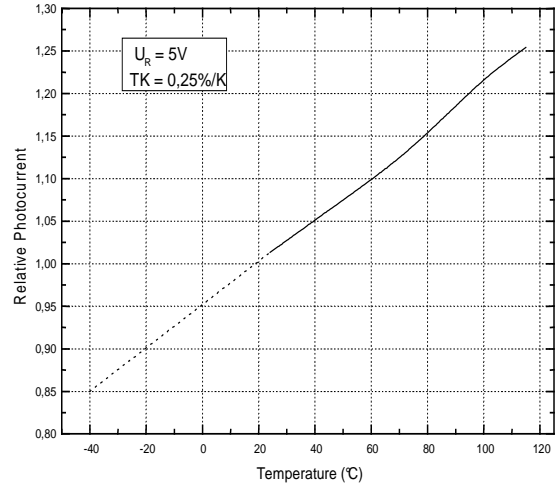
Labeling

Type	Lot N°	R_D (typ.) [GΩ]	Quantity
EPD-525-3-0.5			

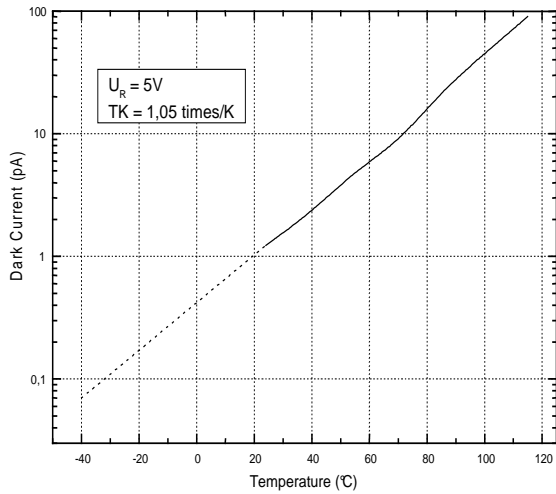
Responsivity spectrum



Relative Photocurrent vs. Temperature



Dark Current vs. Temperature



Short-circuit current vs. illuminance (typical)²⁾

