

Wavelength	Type	Technology	Case
Blue-Green	water clear	GaP	5 mm plastic lens

	Description Selective photodiode mounted in standard 5 mm package with standoff. Narrow bandwidth and high spectral sensitivity in the range of max. eye responsivity (480...560 nm). Note: Special packages without standoff available on request
	Applications light barriers, automation, optical analytics

Miscellaneous Parameters

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

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.62	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}	-30 to +100	°C
Soldering Temperature	$t \leq 3$ s, 3 mm from case	T_{sld}	260	°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	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	$\lambda_{min}, \lambda_{max}$	410		580	nm
Spectral bandwidth at 50%	$V_R = 0$ V	$\Delta\lambda_{0.5}$		70		nm
Shunt resistance	$V_R = 10$ mV	R_{SH}		300		GΩ
Noise equivalent power	$\lambda = 525$ nm	NEP		4.3×10^{-15}		W/√Hz
Specific detectivity	$\lambda = 525$ nm	D^*		1.8×10^{13}		$\text{cm} \cdot \sqrt{\text{Hz}} \cdot \text{W}^{-1}$
Junction capacitance	$V_R = 0$ V	C_J		100		pF
Switching time ($R_L = 50 \Omega$)	$V_R = 1$ V	t_r, t_f		35		ns
Photocurrent at illuminant A ^{1,2)}	$V_R = 0$ V $E_v = 1000$ lx	I_{Ph}		270		nA

¹⁾for information only

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

Note: All measurements carried out with JENOPTIK Polymer Systems equipment

Labeling

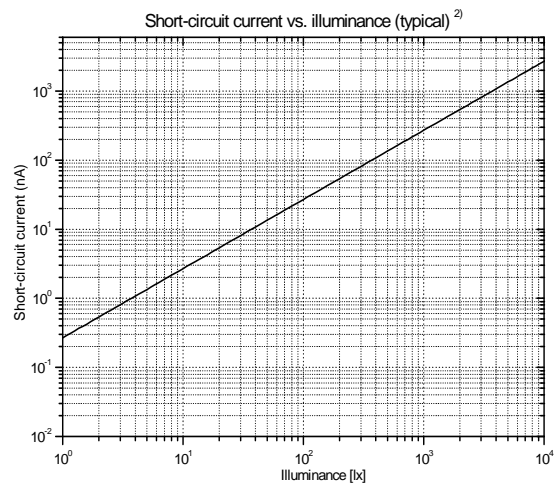
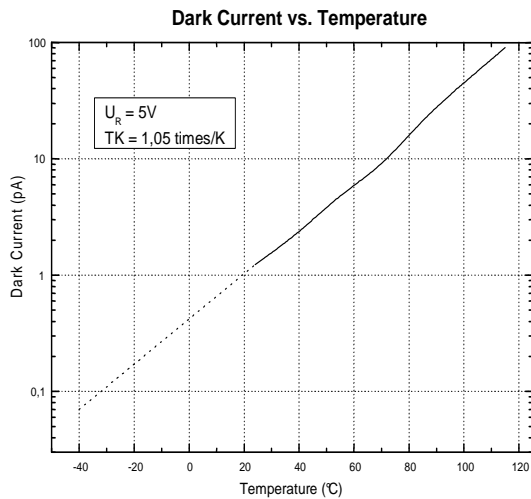
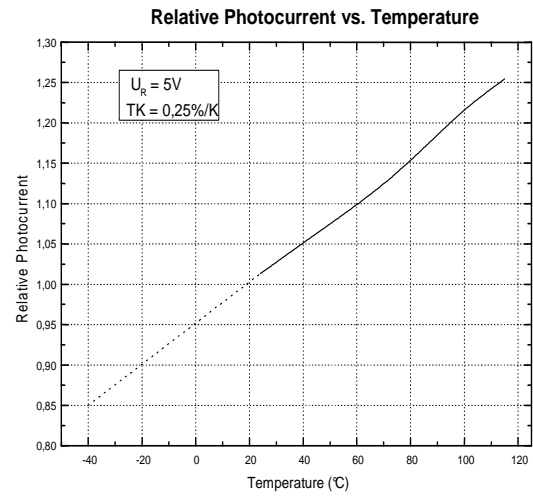
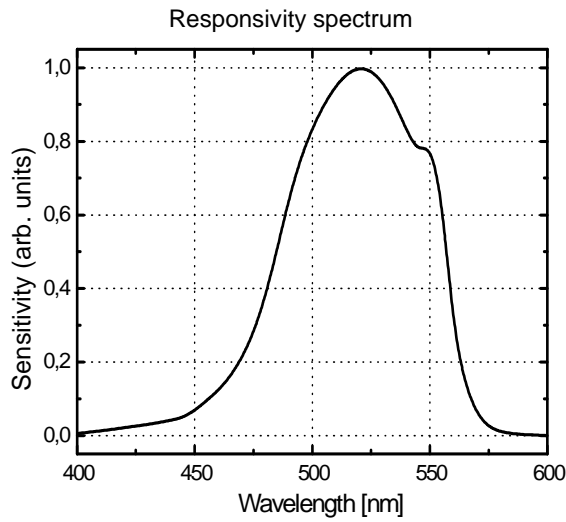
Type	Lot N°	R_D (typ.) [GΩ]	Quantity
EPD-525-5-0.9			

We reserve the right to make changes to improve technical design and may do so without further notice.

Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer.

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