

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

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

Miscellaneous Parameters

T_{amb} = 25°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}	-30 to +100	°C
Soldering Temperature	t ≤ 5 s, 3 mm from case	T _{slid}	260	°C
Acceptance angle at 50% S _λ		φ	20	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	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	λ _{min} , λ _{max}	410		580	nm
Spectral bandwidth at 50%	V _R = 0 V	Δλ _{0.5}		70		nm
Shunt resistance	V _R = 10 mV	R _{SH}		310		GΩ
Noise equivalent power	λ = 525 nm	NEP		4.3x10 ⁻¹⁵		W/√Hz
Specific detectivity	λ = 525 nm	D*		9.6x10 ¹²		cm · √Hz · W ⁻¹
Junction capacitance	V _R = 0 V	C _J		25		pF
Switching time (R _L = 50 Ω)	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}		105		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

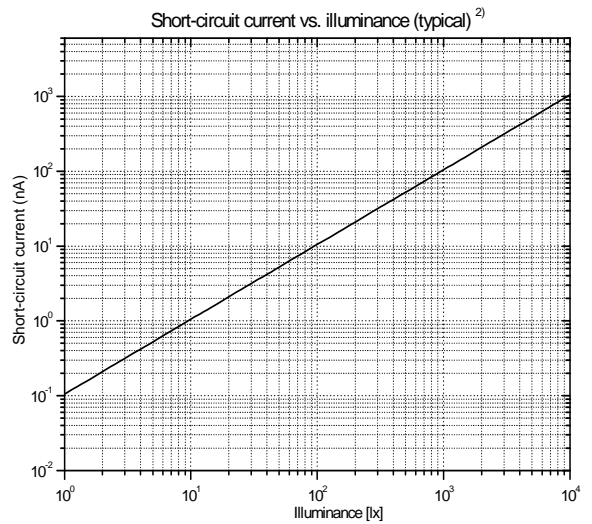
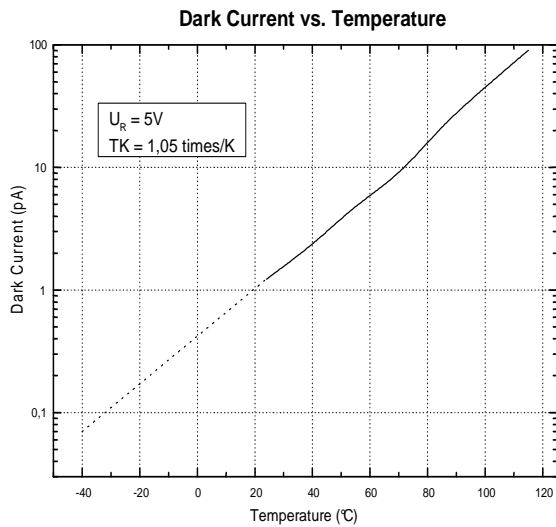
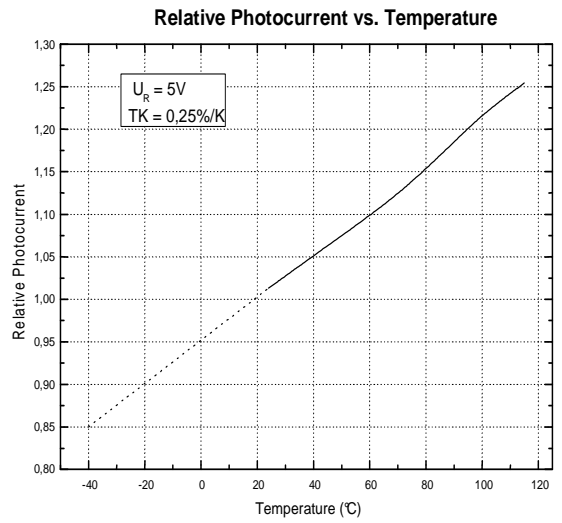
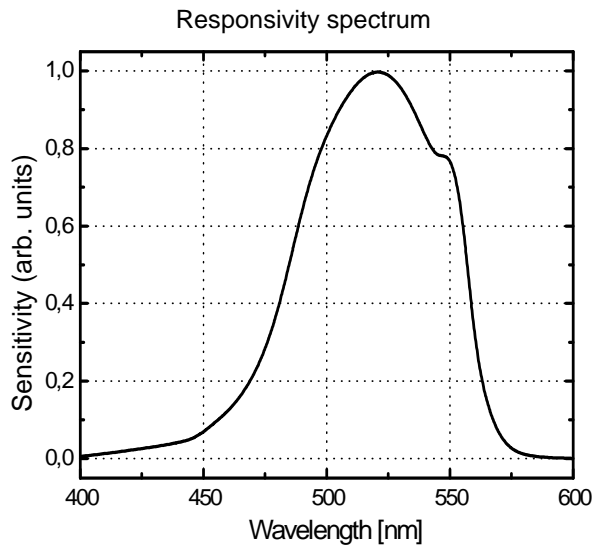
Type	Lot N°	R _D (typ.) [GΩ]	Quantity
EPD-525-5-0.5			

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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