

Wavelength	Type	Technology	Case
Blue - Green selectively	Integrated filter	GaP	3 mm plastic lens

	<p><b>Description</b></p> <p>Selective photodiode chip in standard 3 mm package. Narrow bandwidth and high spectral sensitivity in the range of 400 - 560 nm. Housing without standoff leads.</p> <p>Note: Special packages with standoff available on request</p>
	<p><b>Applications</b></p> <p>Optical communications, safety equipment, automation, analytics, fluorescence detection</p>

**Miscellaneous Parameters**

T<sub>amb</sub> = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.17	mm <sup>2</sup>
Temperature coefficient of I <sub>D</sub>		T <sub>C</sub> (I <sub>D</sub> )	5	%/K
Operating temperature range		T <sub>amb</sub>	-20 to +85	°C
Storage temperature range		T <sub>stg</sub>	-30 to +100	°C
Acceptance angle at 50% S <sub>λ</sub>		φ	20	deg.

**Optical and Electrical Characteristics**

T<sub>amb</sub> = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Breakdown voltage <sup>1)</sup>	I <sub>R</sub> = 10 μA	V <sub>R</sub>		10		V
Dark current	V <sub>R</sub> = 5 V	I <sub>D</sub>		5	30	pA
Peak sensitivity wavelength	V <sub>R</sub> = 0 V	λ <sub>p</sub>	460	470	480	nm
Spectral bandwidth at 50%	V <sub>R</sub> = 0 V	Δλ <sub>0.5</sub>		100		nm
Shunt resistance <sup>1)</sup>	V <sub>R</sub> = 10 mV	R <sub>SH</sub>	70	100		GΩ
Noise equivalent power <sup>1)</sup>	λ = 470 nm	NEP		4.2x10 <sup>-15</sup>		W/√Hz
Specific detectivity <sup>1)</sup>	λ = 470 nm	D*		9.7x10 <sup>12</sup>		cm · √Hz · W <sup>-1</sup>
Junction capacitance	V <sub>R</sub> = 0 V	C <sub>J</sub>		120		pF
Switching time (R <sub>L</sub> = 50 Ω)	V <sub>R</sub> = 5 V	t <sub>r</sub> , t <sub>f</sub>		200		ns
Photo current at Illuminant A	V <sub>R</sub> = 0 V E <sub>v</sub> = 1000 lx	I <sub>Ph</sub>		85		nA

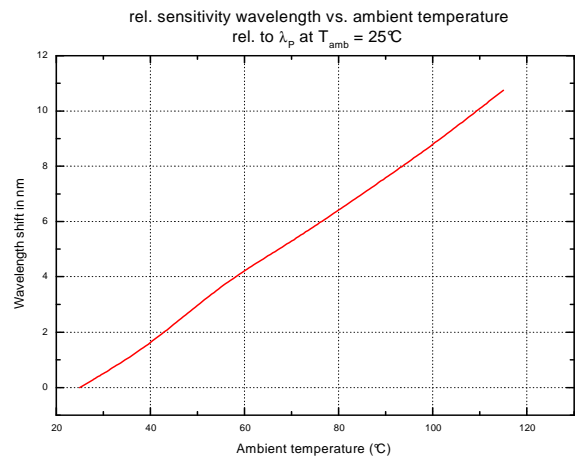
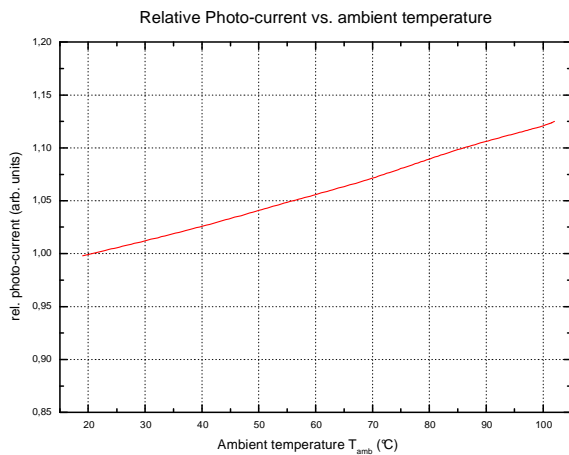
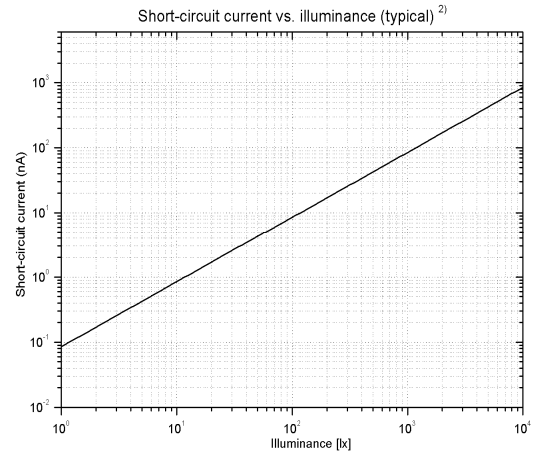
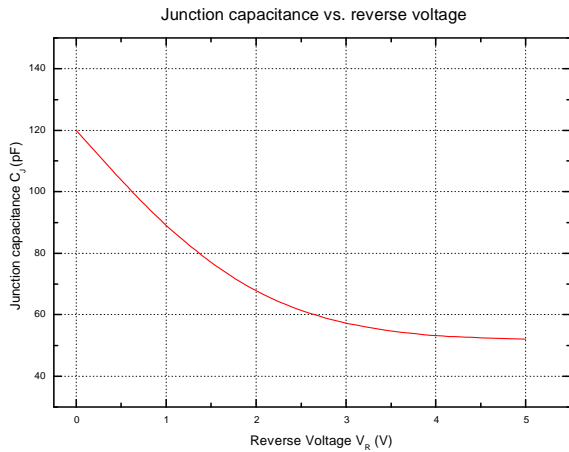
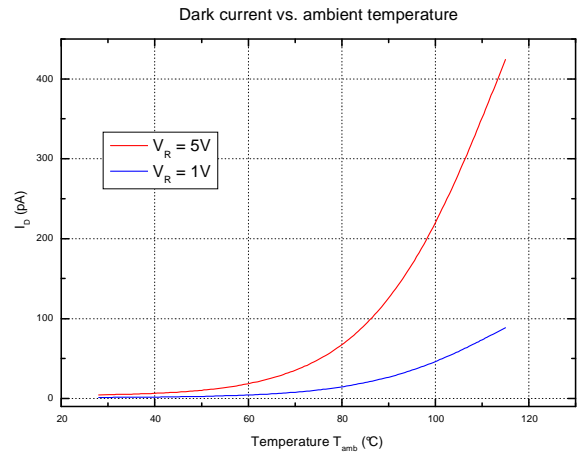
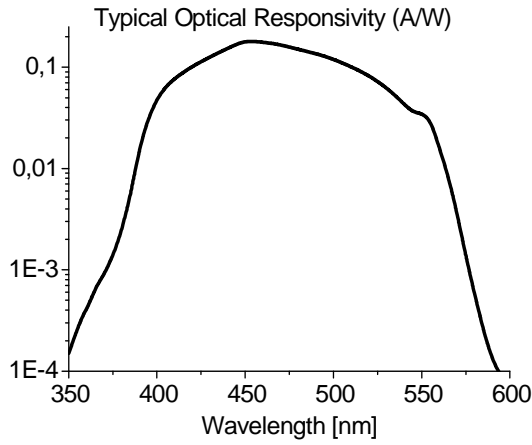
<sup>1)</sup>for information only

Note: All measurements carried out with JENOPTIK Polymer Systems equipment

**Labeling**

Type	Lot N°	R <sub>D</sub> (typ.) [GΩ]	Quantity
EPD-470-3-0.5			

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