

Wavelength	Type	Technology	Case
Red	water clear	AlGaAs/GaAs	5 mm plastic lens

	<p>Description</p> <p>Selective photodiode mounted in standard 5 mm package without standoff . Narrow response range (660 nm peak) by means of integrated filter</p> <p>Note: Special packages with standoff available on request</p> <p>Applications</p> <p>Optical communications, safety equipment, automation, analytics</p>
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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)	4	%/K
Operating temperature range		T _{amb}	-20 to +85	°C
Storage temperature range		T _{stg}	-40 to +100	°C
Soldering Temperature	t ≤ 3 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 = 1 V	I _D		40	200	pA
Peak sensitivity wavelength	V _R = 0 V	λ _p		660		nm
Responsivity at λ _p	V _R = 0 V	S _λ		0.42		A/W
Sensitivity range at 1% ¹⁾	V _R = 0 V	λ _{min} , λ _{max}	605		705	nm
Spectral bandwidth at 50%	V _R = 0 V	Δλ _{0.5}		80		nm
Shunt resistance	V _R = 10 mV	R _{SH}	500	670		GΩ
Noise equivalent power	λ = 660 nm	NEP		8.5x10 ⁻¹⁵		W/√Hz
Specific detectivity	λ = 660 nm	D*		4.8x10 ¹²		cm · √Hz · W ⁻¹
Junction capacitance	V _R = 0 V	C _J		50		pF
Switching time (R _L = 50 Ω)	V _R = 1 V	t _r , t _f		15/30		ns
Photo-current at illuminant A ^{1,2)}	V _R = 0 V E _v = 1000 lx	I _{Ph}		0.75		μA

¹⁾for information only

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

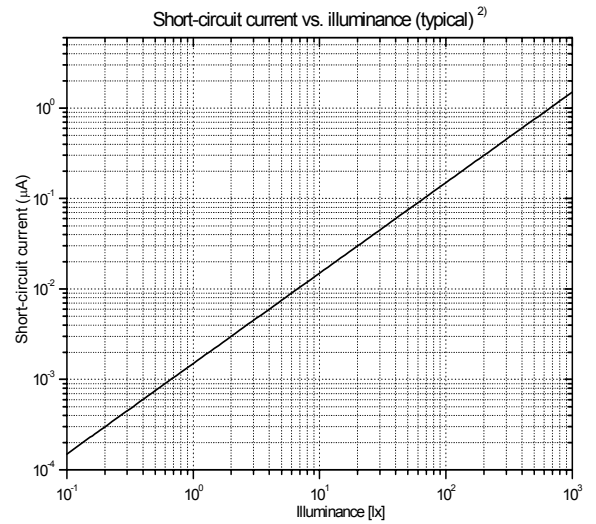
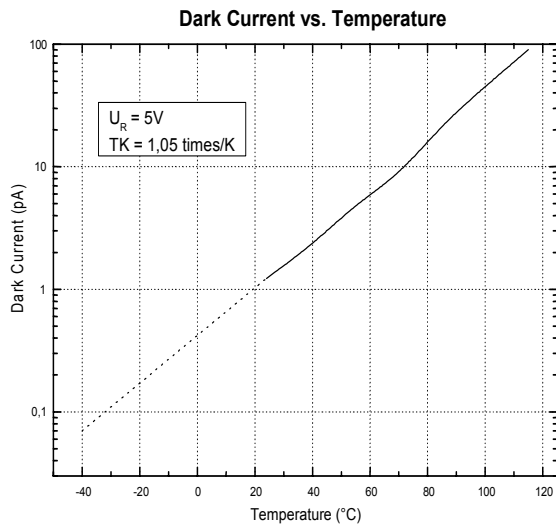
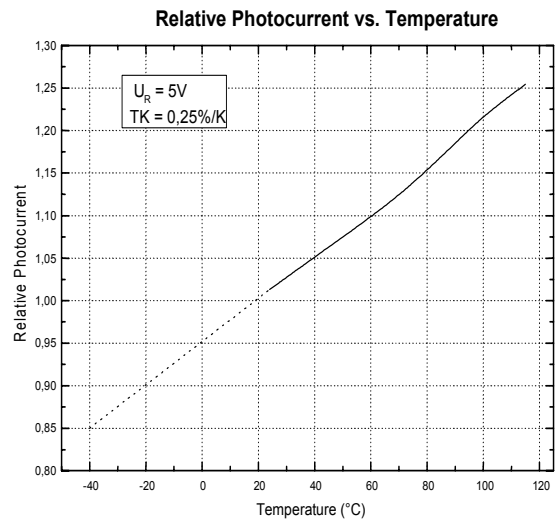
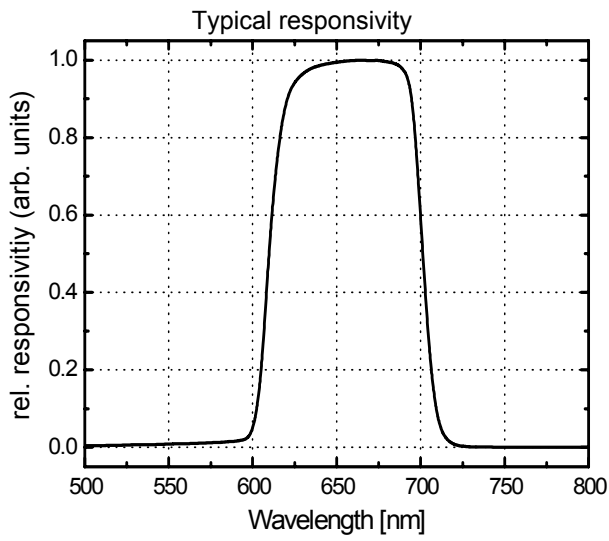
Note: All measurements carried out with *EPIGAP* equipment

Labeling

Type	Lot N°	R _D (typ.) [GΩ]	Quantity
EPD-660-5-0.5			

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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