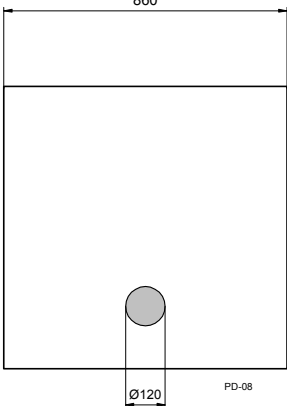


Wavelength range	Type	Technology	Electrodes
Green, selective	Integrated filter	GaP	P (anode) up

	typ. dimensions (μm)	
	typ. thickness 270 (± 20) μm anode gold alloy, 1.5 μm cathode gold alloy, 0.5 μm	Description Narrow bandwidth and high spectral sensitivity in the range of max. eye responsivity (480..560 nm), low cost chip Applications Nearly λ matched detection, measurement systems, daylight sensors

Miscellaneous Parameters

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

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.73	mm^2
Operating temperature range		T_{amb}	-40 to +125	$^\circ\text{C}$
Storage temperature range		T_{stg}	-40 to +125	$^\circ\text{C}$
Temperature coefficient of I_D	$T = -40 \dots 120^\circ\text{C}$	$T_C(I_D)$	4.7	%/K
Temperature coefficient of I_{PH}	$T = -40 \dots 120^\circ\text{C}$	$T_C(I_{\text{PH}})$	0.25	%/K
Temperature coefficient of λ_c	$T = -40 \dots 120^\circ\text{C}$	$T_C(\lambda_c)$	0.15	nm/K

Optical and Electrical Characteristics

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Dark current	$V_R = 5 \text{ V}$	I_D		5	30	pA
Responsivity at 525 nm ¹⁾	$V_R = 0 \text{ V}$	S_λ	0.04	0.08		A/W
Responsivity at 525 nm ²⁾	$V_R = 0 \text{ V}$	S_λ	0.15	0.3		A/W
Peak sensitivity wavelength	$V_R = 0 \text{ V}$	λ_p		525		nm
Sensitivity range at 1% ¹⁾	$V_R = 0 \text{ V}$	$\lambda_{\text{min}}, \lambda_{\text{max}}$	410		580	nm
Spectral bandwidth at 50%	$V_R = 0 \text{ V}$	$\Delta\lambda_{0.5}$		70		nm
Dark resistance	$V_R = 10 \text{ mV}$	R_D		350		$\text{G}\Omega$
Noise equivalent power ¹⁾	$\lambda = 525 \text{ nm}$	NEP		1.6×10^{-14}		$\text{WHz}^{1/2}$
Junction capacitance	$V_R = 0 \text{ V}$	C_J		100		pF
Switching time ($R_L = 50 \Omega$)	$V_R = 1 \text{ V}$	t_r, t_f		35		ns

¹⁾ Measured on bare chip on TO-18 header

²⁾ Measured on epoxy covered chip on TO-18 header

Labeling

Type	Typ. I_D [pA]	Typ. S_λ [A/W]	Lot N°	Quantity
EPC-525-0.9-1				

Packing: Chips on adhesive film with wire-bond side on top

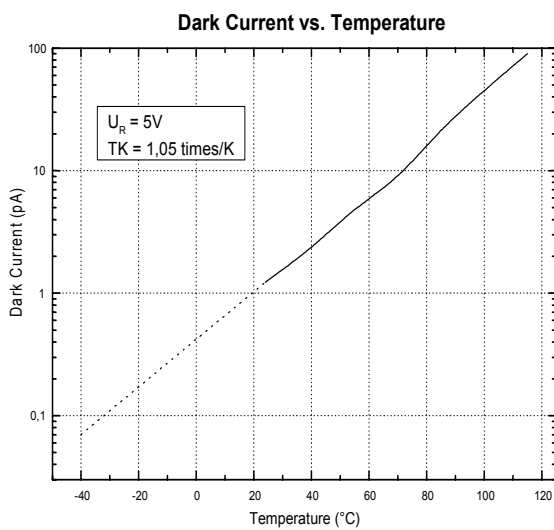
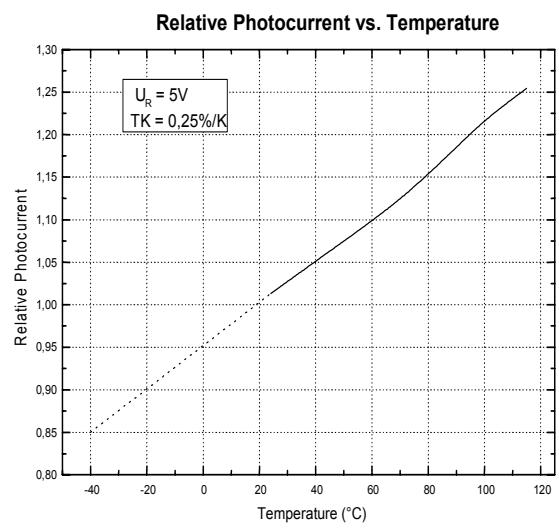
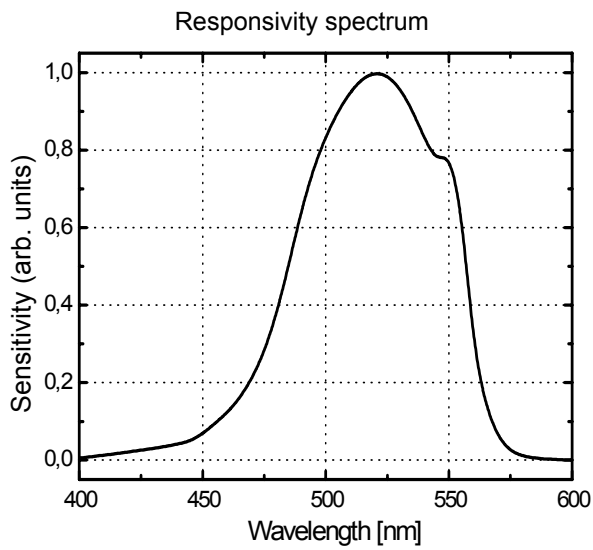
*Note: All measurements carried out with *EPIGAP* equipment

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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