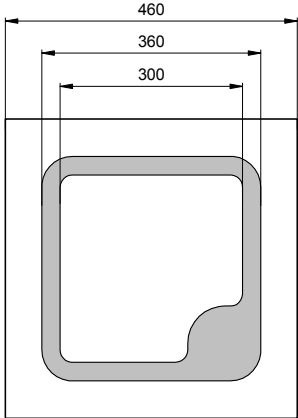


Wavelength range	Type	Technology	Electrodes
Green, selective	Integrated filter	GaP	P (anode) up

	typ. dimensions (μm)	
	typ. thickness 260 (±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 V_{λ} matched detection, measurement systems, daylight sensors

Miscellaneous Parameters

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

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.17	mm ²
Operating temperature range		T_{amb}	-40 to +125	°C
Storage temperature range		T_{stg}	-40 to +125	°C
Temperature coefficient of I_D	$T = -40 \dots 120^{\circ}\text{C}$	TC_{ID}	4.7	%/K
Temperature coefficient of I_{PH}	$T = -40 \dots 120^{\circ}\text{C}$	TC_{IPH}	0.25	%/K
Temperature coefficient of λ_c	$T = -40 \dots 120^{\circ}\text{C}$	TC_{λ_c}	0.15	nm/K

Optical and Electrical Characteristics

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Breakdown voltage ³	$I_R = 10 \mu\text{A}$	V_R	5			V
Dark current	$V_R = 5 \text{ V}$	I_D		5	30	pA
Peak sensitivity wavelength	$V_R = 0 \text{ V}$	λ_p		525		nm
Responsivity at λ_p^1	$V_R = 0 \text{ V}$	S_{λ}	0.04	0.08		A/W
Responsivity at λ_p^2	$V_R = 0 \text{ V}$	S_{λ}	0.15	0.3		A/W
Sensitivity range at 1% ¹	$V_R = 0 \text{ V}$	$\lambda_{min}, \lambda_{max}$	410		580	nm
Spectral bandwidth at 50%	$V_R = 0 \text{ V}$	$\Delta\lambda_{0.5}$		70		nm
Junction capacitance	$V_R = 0 \text{ V}$	C_J		25		pF
Switching time ($R_L = 50 \Omega$)	$V_R = 1 \text{ V}$	t_r, t_f		30		ns

¹Measured on bare chip on TO-18 header

²Measured on epoxy covered chip on TO-18 header

³information only

Labeling

Type	Typ. I_D [pA]	Typ. S_{λ} [A/W]	Lot N°	Quantity
EPC-525-0.5				

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

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

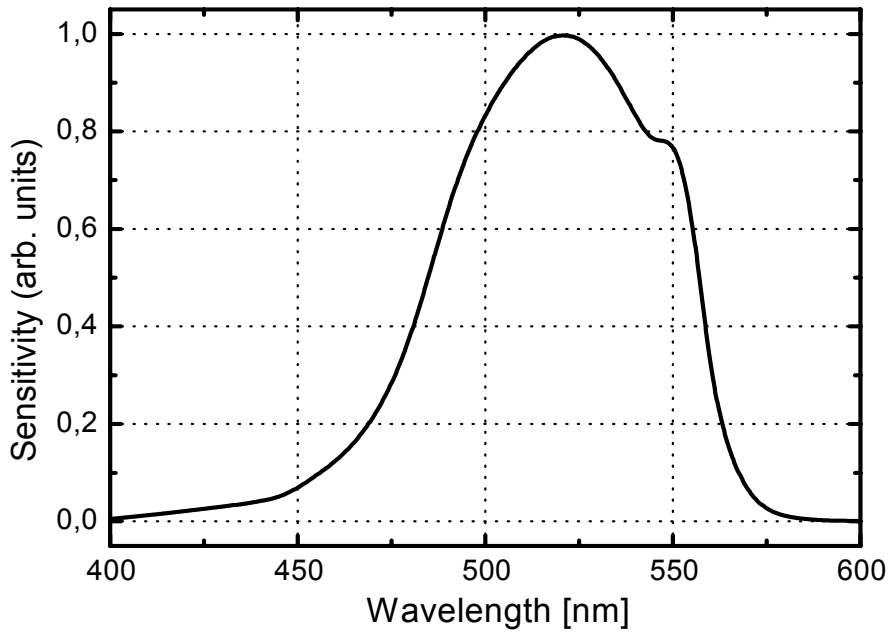
We reserve the right to make changes to improve technical design and may do so without further notice.

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

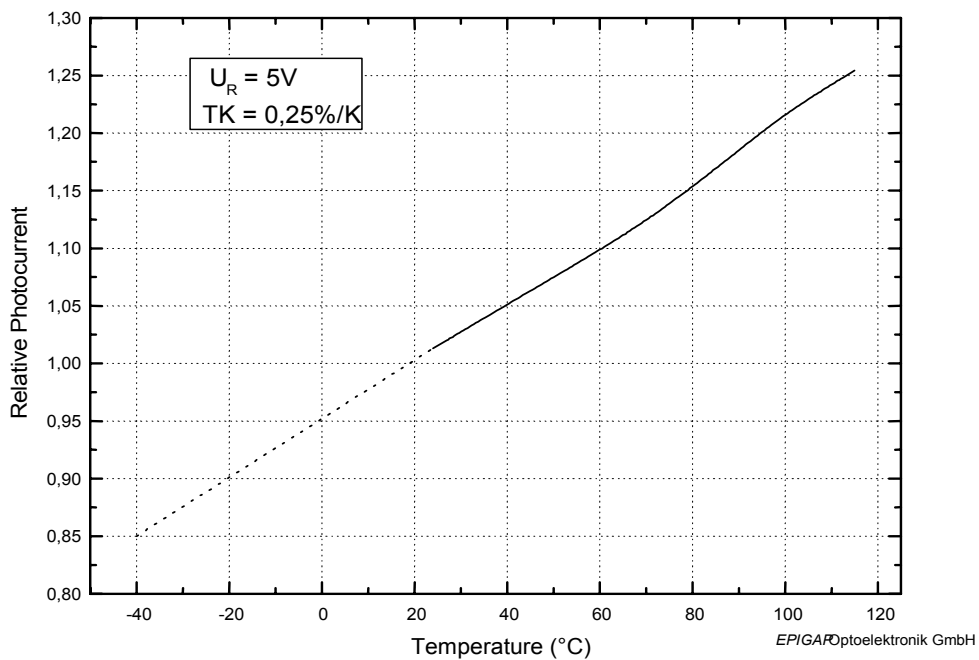
EPIGAP Optoelektronik GmbH, D-12555 Berlin, Köpenicker Str.325 b, Haus 201

Tel.: +49-30-6576 2543, Fax : +49-30-6576 2545

Typical sensitivity spectrum

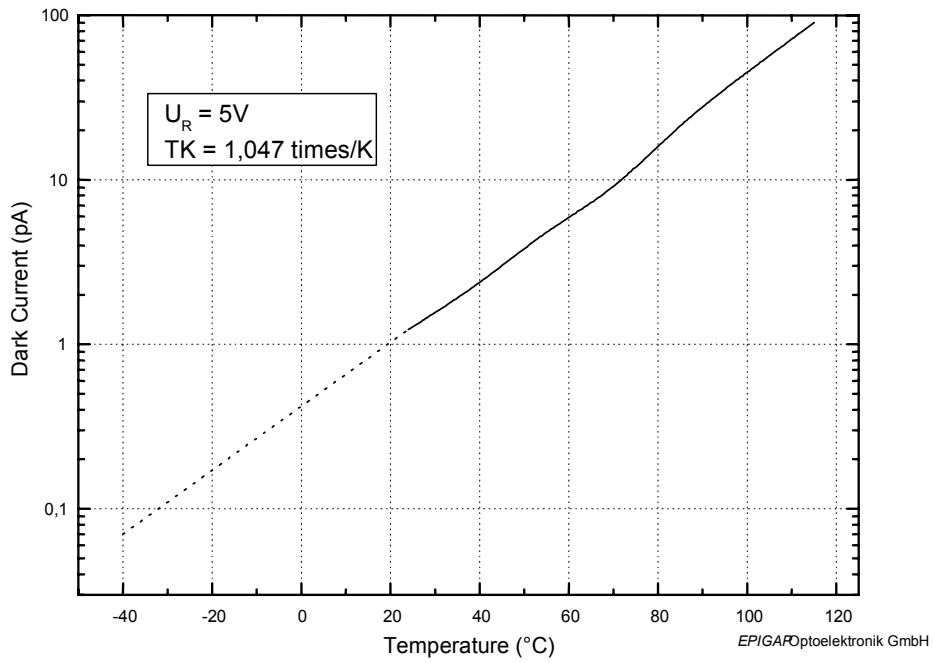


Relative Photocurrent vs. Temperature of EPC-525-0.5



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.

Dark Current vs. Temperature of EPC-525-0.5



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.