

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	<b>Description</b> Narrow bandwidth and high spectral sensitivity in the range of max. eye responsivity (480...560 nm), low cost chip  <b>Applications</b> Nearly $\lambda$ 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	0.18	mm <sup>2</sup>
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 $\lambda_c$	$T = -40 \dots 120^{\circ}\text{C}$	$TC_{\lambda c}$	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
Spectral range at 0.5 max.	$V_R = 0 \text{ V}$	$\lambda_{0.5}$	480		560	nm
Responsivity at 525 nm <sup>1</sup>	$V_R = 0 \text{ V}$	$S_{\lambda}$	0.04	0.08	0.15	A/W
Responsivity at 525 nm <sup>2</sup>	$V_R = 0 \text{ V}$	$S_{\lambda}$	0.15	0.25	0.38	A/W
Spectral bandwidth at 50%	$V_R = 0 \text{ V}$	$\Delta\lambda_{0.5}$		75		nm
Dark current ( $E_e = 0 \text{ W/m}^2$ )	$V_R = 5 \text{ V}$	$I_D$		5	30	pA
Central sensitivity wavelength	$V_R = 0 \text{ V}$	$\lambda_c$	510	525	535	nm

<sup>1</sup>Measured on bare chip on TO-18 header

<sup>2</sup>Measured on epoxy covered chip on TO-18 header

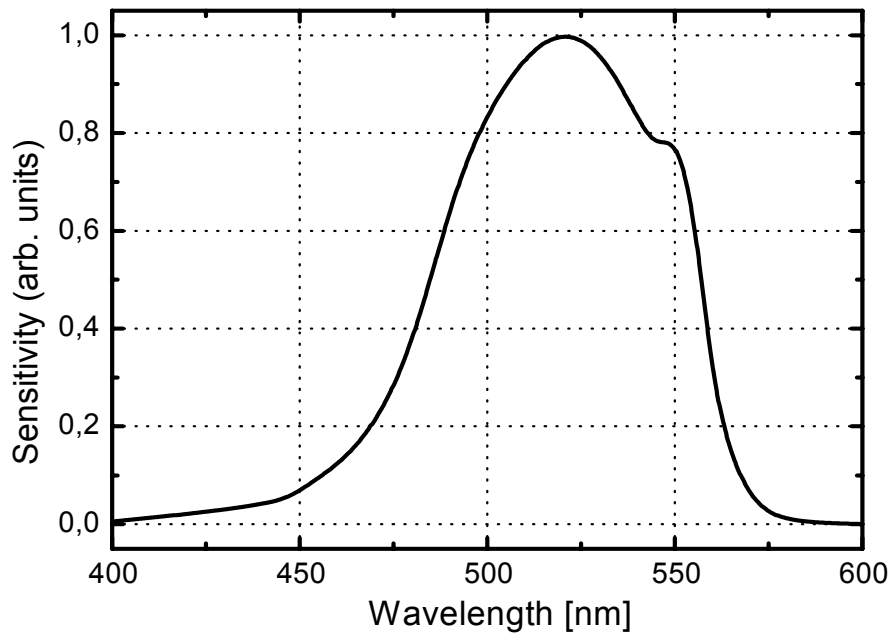
## Labeling

Type	Typ. $I_D$ [pA]	Typ. $S_{\lambda}$ [A/W]	Lot N°	Quantity
EPC-525-0.5-2				

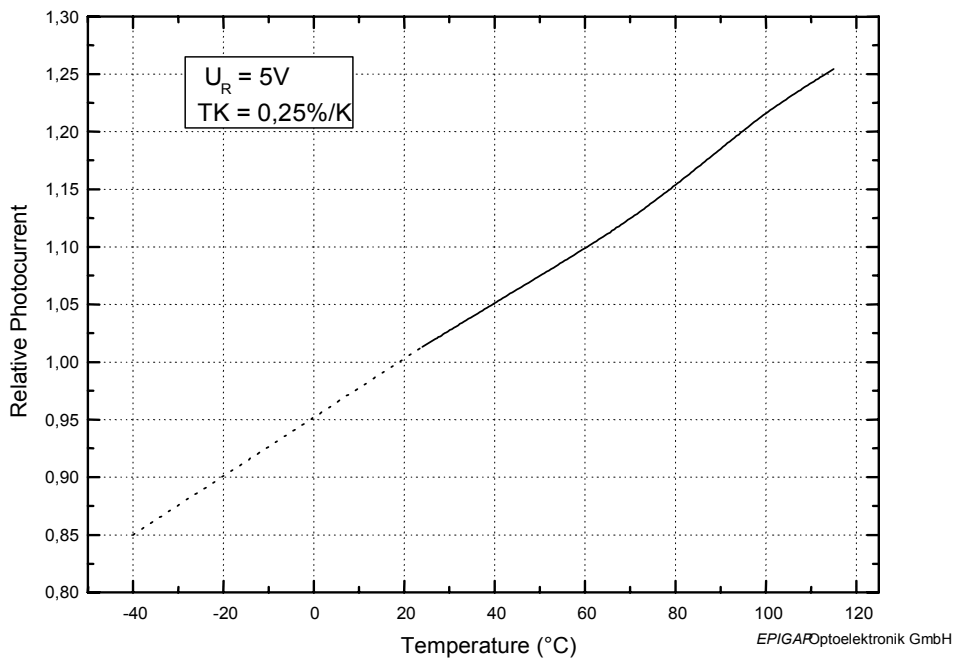
**Packing:** Chips on adhesive film with wire-bond side on top

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

Responsivity spectrum



Relative Photocurrent vs. Temperature of EPC-525-0.5-2



Dark Current vs. Temperature of EPC-525-0.5-2

