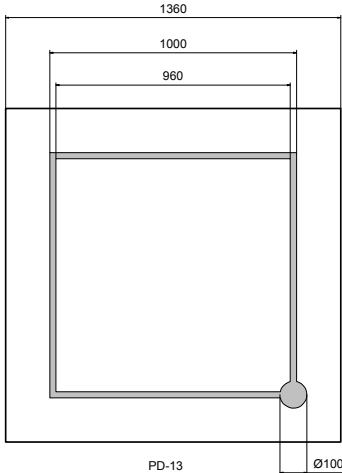


Wavelength range	Type	Technology	Electrodes
Blue, selective	Integrated filter	GaP	P (anode) up

	typ. dimensions ( $\mu\text{m}$ )	
	typ. thickness 300 ( $\pm 40$ ) $\mu\text{m}$ anode gold alloy, 1.5 $\mu\text{m}$ cathode gold alloy, 0.5 $\mu\text{m}$	<b>Description</b> Narrow bandwidth and high spectral sensitivity in blue-green range (425..525 nm), low cost chip  <b>Applications</b> Fluorescence detection, measurement systems, color sensors

## Miscellaneous Parameters

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

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	1.76	$\text{mm}^2$
Temperature coefficient of $I_D$	$T = -40 \dots 120^\circ\text{C}$	$T_C(I_D)$	5.0	%/K
Temperature coefficient of $I_{PH}$	$T = -40 \dots 120^\circ\text{C}$	$T_C(I_{PH})$	0.15	%/K
Operating temperature range		$T_{\text{amb}}$	-40 to +125	$^\circ\text{C}$
Storage temperature range		$T_{\text{stg}}$	-40 to +125	$^\circ\text{C}$

## Optical and Electrical Characteristics

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Reverse voltage <sup>3</sup>	$I_R = 10 \mu\text{A}$	$V_R$	5			V
Dark current ( $E_e = 0 \text{ W/m}^2$ )	$V_R = 5 \text{ V}$	$I_D$		5	30	pA
Central sensitivity wavelength	$V_R = 0 \text{ V}$	$\lambda_C$	460	470	480	nm
Responsivity at $\lambda_C^1$	$V_R = 0 \text{ V}$	$S_\lambda$		0.18		A/W
Responsivity at $\lambda_C^2$	$V_R = 0 \text{ V}$	$S_\lambda$		0.30		A/W
Spectral range at 0.5 max.	$V_R = 0 \text{ V}$	$\lambda_{0.5}$	425		525	nm
Sensitivity range at 1%	$V_R = 0 \text{ V}$	$\lambda_{\text{min}}, \lambda_{\text{max}}$	380		570	nm
Spectral bandwidth at 50%	$V_R = 0 \text{ V}$	$\Delta\lambda_{0.5}$		100		nm

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

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

<sup>3</sup>information only

## Labeling

Type	Typ. $I_D$ [pA]	Typ. $S_\lambda$ [A/W]	Lot N°	Quantity
EPC-470-1.4				

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

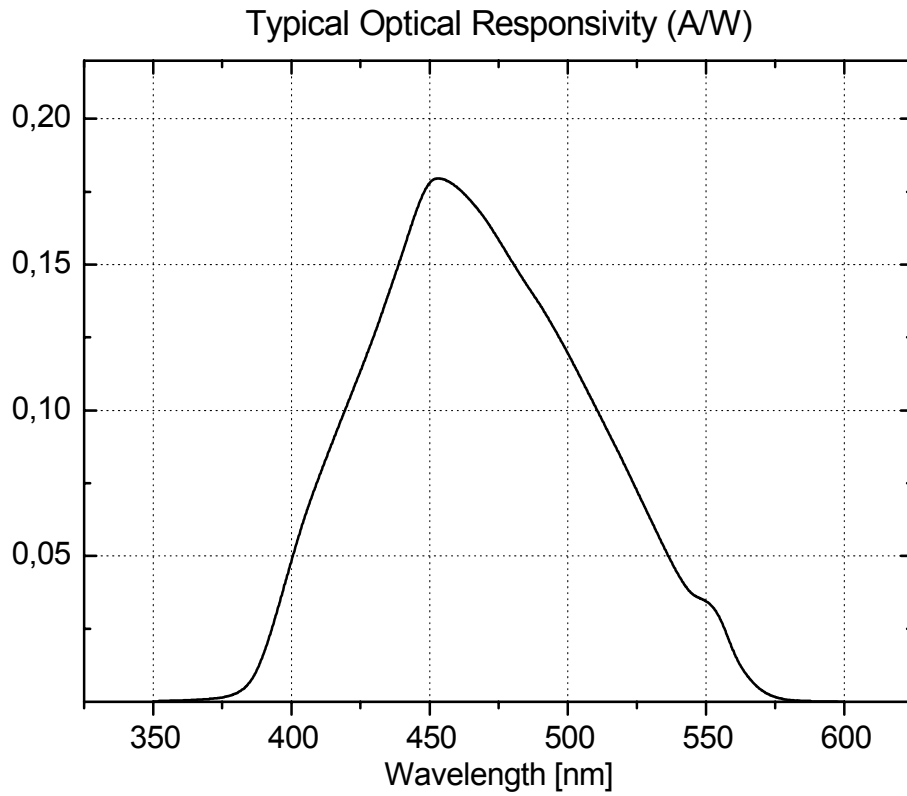
\*Note: All measurements carried out with *EPIGAP* equipment

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



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.