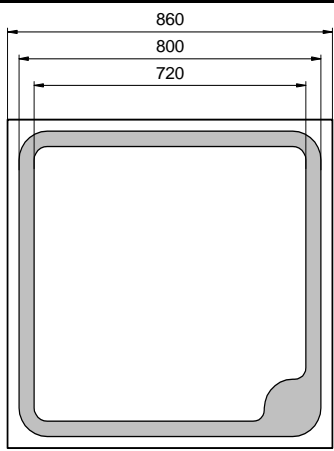


Wavelength range	Type	Technology	Electrodes
Red, selective	Integrated filter	AlGaAs/GaAs	P (anode) up

	typ. dimensions (μm)	
	<u>typ. thickness</u> 260 μm <u>anode</u> gold alloy, 1.5 μm <u>cathode</u> gold alloy, 0.5 μm	<b>Description</b> red-selective photodiode with narrow response range (660 nm peak)  <b>Applications</b> Optical communications, safety equipment, light barriers

## Miscellaneous Parameters

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

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.62	mm <sup>2</sup>
Operating temperature range		$T_{amb}$	-40 to +125	°C
Storage temperature range		$T_{stg}$	-40 to +125	°C

## Optical and Electrical Characteristics

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Peak sensitivity	$V_R = 0\text{ V}$	$\lambda_P$		660		nm
Spectral range at 50%, lower limit	$V_R = 0\text{ V}$	$\lambda_{0.5}$	600	620	630	nm
Spectral range at 50 %, upper limit	$V_R = 0\text{ V}$	$\lambda_{0.5}$	690	700	720	nm
Responsivity at $\lambda_P^1$	$V_R = 0\text{ V}$	$S_\lambda$		0.2		A/W
Responsivity at $\lambda_P^2$	$V_R = 0\text{ V}$	$S_\lambda$		0.42		A/W
Spectral bandwidth at 50%	$V_R = 0\text{ V}$	$\Delta\lambda_{0.5}$		80		nm
Dark current	$V_R = 1\text{ V}$	$I_D$		40	300	pA
Junction capacitance	$V_R = 0\text{ V}$	$C_J$		40		pF
Switching time	$V_R = 1\text{ V}$	$t_r, t_f$		40		ns

<sup>1</sup>Measured on bare covered 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-660-0.9				

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

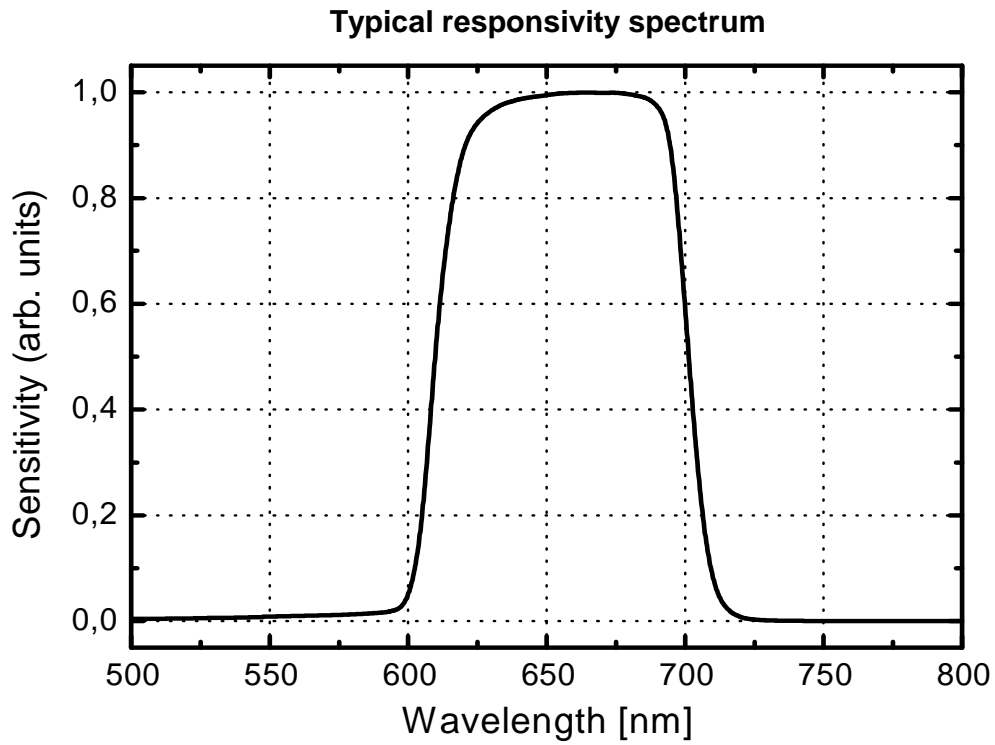
\*Note: All measurements carried out with *EPIGAP* equipment

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



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