

# EPIGAP Optronik GmbH

Koepenicker Str. 325b  
 D-12555 Berlin  
 Fon: +49 (0)30 657637 60  
 Fax: +49 (0)30 657637 70  
 sales@epigap-optronic.de



## Data Sheet

page 1 of 2

### Selective photodiode

### EOPD-660-5-0.5

Rev. 01, 2011

Wavelength range	Type	Case
visible / red	AlGaAs	5 mm plastic lens, water clear

	<b>Description:</b> Selective photodiode mounted in standard 5 mm package without stand off. Narrow response range (660 nm peak) by means of integrated filter.
	<b>Applications</b> Optical communication, safety equipment, automation, analytics

### Maximum Ratings

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

Parameter	Symbol	Value	Unit
Active area	A	0.17	mm <sup>2</sup>
Temperature coefficient of $I_D$	TC( $I_D$ )	5	%/K
Operating temperature range	$T_{amb}$	-20 to +85	°C
Storage temperature range	$T_{stg}$	-40 to +100	°C
Soldering temperature	$T_{sld}$	260	°C
Acceptance angle at 50% $S_{\lambda}$	$\phi$	20	deg.

### Optical and Electrical Characteristics

$T_{amb} = 23^{\circ}\text{C}$ , unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Breakdown voltage	$I_R = 10 \mu\text{A}$	$V_R$	5			V
Dark current	$V_R = 1 \text{ V}$	$I_D$		20	200	nA
Peak sensitivity wavelength	$V_R = 0 \text{ V}$	$\lambda_p$		660		nm
Responsivity at $\lambda_p$	$V_R = 0 \text{ V}$	$S_{\lambda}$		0.42		A/W
Sensitivity range at 1%	$V_R = 0 \text{ V}$	$\lambda_{min}, \lambda_{max}$	605		705	nm
Spectral bandwidth at 50%	$V_R = 0 \text{ V}$	$\Delta\lambda_{0.5}$		80		nm
Shunt resistance	$V_R = 10 \text{ mV}$	$R_{SH}$	500	670		GΩ
Junction capacitance	$V_R = 0 \text{ V}$	$C_J$		50		pF
Photocurrent at illuminant A	$V_R = 0 \text{ V}$	$I_{PH}$		0.75		μA
	$E_V = 1000 \text{ lx}$					
Switching times ( $R_L = 50 \Omega$ )	$V_R = 1 \text{ V}$	$t_r, t_f$		15; 30		ns



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 Optronik GmbH

Koepenicker Str. 325b  
D-12555 Berlin  
Fon: +49 (0)30 657637 60  
Fax: +49 (0)30 657637 70  
sales@epigap-optronic.de

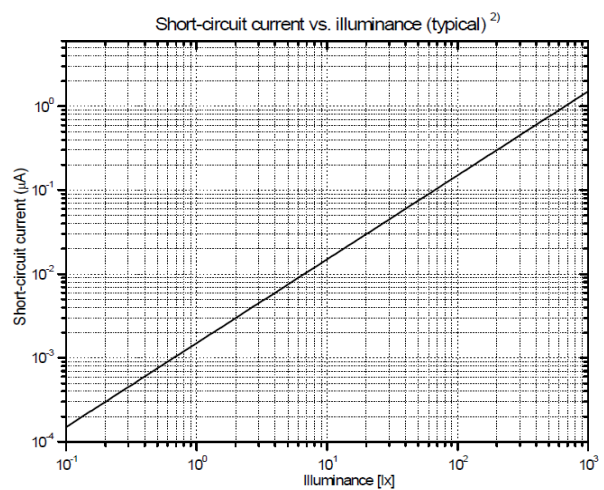
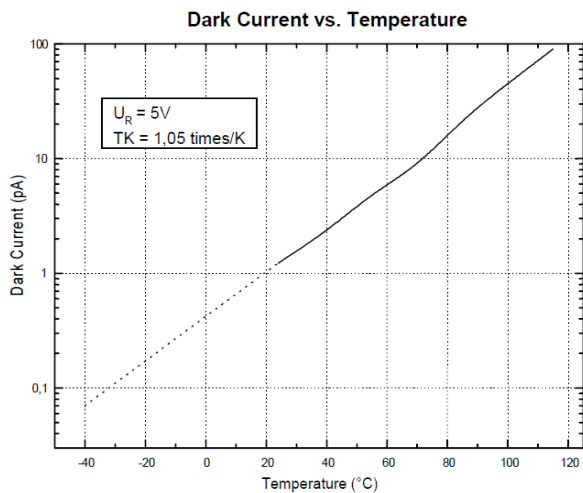
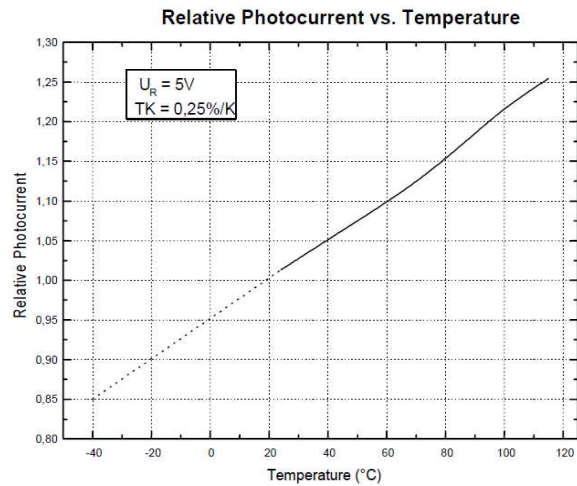
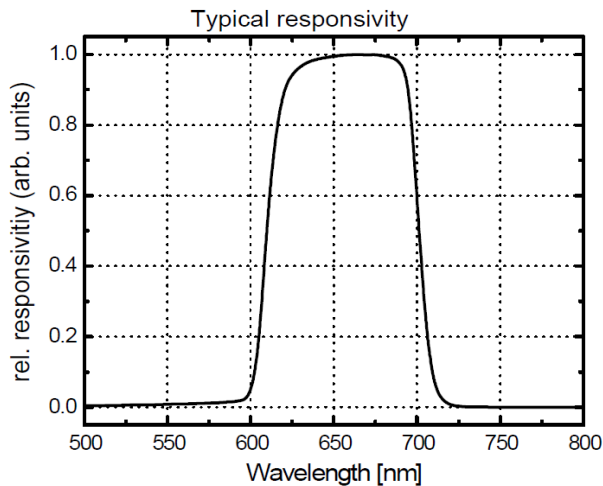


## Data Sheet

### Selective photodiode

### EOPD-660-5-0.5

page 2 of 2  
Rev. 01, 2011



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.