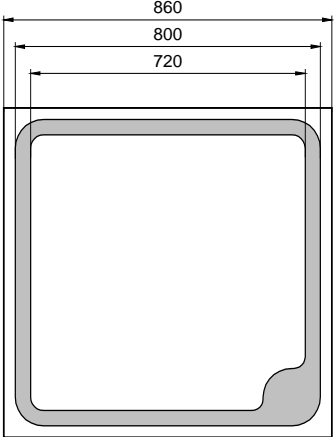


Wavelength range	Type	Technology	Electrodes
UV-blue-green	Schottky Contact	GaP	P (anode) up

 <p style="text-align: center;">PD-03</p>	typ. dimensions (μm)	
	typ. thickness 300 μm  anode gold alloy, 1.5 μm  cathode gold alloy, 0.5 μm	<b>Description</b> High spectral sensitivity in the blue and ultraviolet range, low dark currents, low cost chip with high degradation stability  <b>Applications</b> special light barriers, sensors for flame control and automation

## Miscellaneous Parameters

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

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	0.51	mm <sup>2</sup>
Temperature coefficient of $I_D$		$T_C(I_D)$	1.07	1/K
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
Dark current	$V_R = 5\text{ V}$	$I_D$		5	20	pA
Peak sensitivity wavelength	$V_R = 0\text{ V}$	$\lambda_p$		440		nm
Responsivity at $\lambda_p$ *	$V_R = 0\text{ V}$	$S_\lambda$		0.17		A/W
Sensitivity range at 1%	$V_R = 0\text{ V}$	$\lambda_{min}, \lambda_{max}$	<110		570	nm
Spectral bandwidth at 50%	$V_R = 0\text{ V}$	$\Delta\lambda_{0.5}$		180		nm
Shunt resistance	$V_R = 10\text{ mV}$	$R_D$	100	125		GΩ
Noise equivalent power	$\lambda = 440\text{ nm}$	NEP		$7.7 \times 10^{-15}$		W/ $\sqrt{\text{Hz}}$
Junction capacitance	$V_R = 0\text{ V}$	$C_J$		120		pF
Switching time	$V_R = 5\text{ V}$	$t_r, t_f$		0.7/13		ns

\*Measured on bare chip on TO-18 header with *EPIGAP* equipment

## Labeling

Type	Typ. $I_D$ [pA]	Typ. $S_\lambda$ [A/W]	Lot N°	Quantity
EPC-440-0.9				

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

Typical responsivity spectrum

