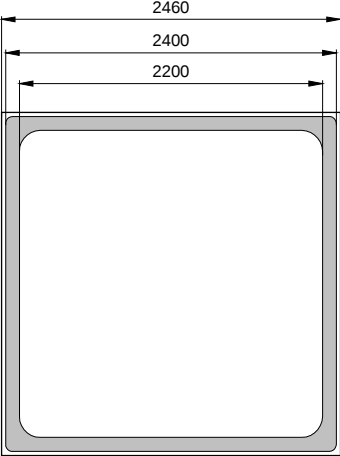


Wavelength range	Type	Technology	Electrodes
UV-blue-green	Schottky Contact	GaP	P (anode) up

	typ. dimensions (µm)	
	<u>typ. thickness</u> 300 µm <u>anode</u> bond gold 1.0 µm <u>cathode</u> gold alloy, 0.5 µm	Description High spectral sensitivity in the blue and ultraviolet range, low dark currents, low cost chip with high degradation stability Applications 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	4.8	mm ²
Temperature coefficient of I_D		$T_C(I_D)$	7.0	%/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		15	40	pA
Peak sensitivity wavelength	$V_R = 0\text{ V}$	λ_p		440		nm
Responsivity at λ_p^*	$V_R = 0\text{ V}$	S_λ		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	80	100		GΩ
Noise equivalent power	$\lambda = 440\text{ nm}$	NEP		1.3×10^{-14}		W/ $\sqrt{\text{Hz}}$
Junction capacitance	$V_R = 0\text{ V}$	C_J		1000		pF
Switching time ($R_L = 50\text{ }\Omega$)	$V_R = 5\text{ V}$	t_r, t_f		1/60		ns

*Measured on bare chip on TO-18 header

Labeling

Type	Typ. I_D [pA]	Typ. S_λ [A/W]	Lot N°	Quantity
EPC-440-2.5				

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

Note: All measurements carried out with *EPIGAP* equipment

Typical responsivity spectrum

